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LECTURES

ON

DISEASES OF THE BRAIN AND NERVOUS SYSTEM,

DELIVERED IN THE UNIVERSITY OF PARIS.

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LECTURE XIX.

TUBERCLES OF THE NERVOUS CENTRES.

GENTLEMEN: The several alterations of nutrition and secretion, having their seat in the nervous centres, which we must study in order to render our history complete, may present themselves under a different aspect. The interstitial secretion of the brain may become modified in such a manner, that we find various molecules laid down in place of the nervous atoms, and this change of secretion gives rise to what are generally called accidental productions. We shall take up the history of these bodies; they constitute a class of disease which is the last that is revealed to our senses by the scalpel, and in this respect is distinguished from that far different series, where the functional disorders are sometimes of the most striking kind, although the nervous system appears, on examination, not to deviate in the slightest degree from the normal structure or aspect. The accidental productions of which we now speak, are various, but the principal amongst them may be comprehended under tubercles and cancer, to which we shall devote our chief attention; we shall pass rapidly over the rest. Let us commence with

The Particular Situations, Size, and Number,

of tubercles of the nervous centres. The accidental product, so well known under the name of "tubercle," presents the same appearance and the same anatomical characters, when seated in the brain, as when found in any other part of the body; these are, undoubtedly, known to you all; we shall not, therefore, stop to enter into any details on its pathological anatomy. Tubercles may occupy any portion of the cerebro-spinal axis; however, they are more frequently found in the cerebral hemispheres than in any other part of the nervous centres, and then they exist more often above the level of the lateral ventricles than below them, in the parts nearer the base of the brain. They are very frequently seated in or between the convolutions on the surface of the hemispheres. In some of these cases they are actually developed in the substance of the brain, but in a majority they arise from the pia mater, and, gradually increasing in magnitude, become at length completely lodged in the nervous pulp. Tubercles have also been found in the medulla oblongata; of this we have more than one example; they may occupy the substance of the pons varolii, or either of the prolongations detached from that body to the cerebrum or the cerebellum (*crura cerebri; crura cerebelli*); they have been often met with in the substance of the cerebellum, where they may be seated either in the median, or in one of the lateral lobes. Dr. MITIVIE has described a case of tubercle occupying the body known under the name of the "pituitary gland." The spinal marrow is not exempt from this accidental product. Tubercles have been found in all parts of the chord, from top to bottom, and in the bulb. However, we may say, on general principles, that they are more common in the dorsal portion of the spinal marrow than at any other part. They may occupy indifferently either the cortical or the medullary substances, and we have examples where the tubercle was developed within the limit of those two substances, separating them from each other in such a manner that it was difficult to say to which of the two it belonged. *The size of the tubercles* situated in the nervous centres, is very various. In a great many cases they are not larger than a grain of millet-seed, presenting themselves under the form and aspect of small round transparent granulations. In others we find them varying from the size of a nut to a hen's egg; tubercles of a much

larger volume have been met with. Thus, for example, cases are on record, where nearly half the cerebrum, or one or both hemispheres of the cerebellum, was transformed into one mass of tubercular matter.

The number of tubercles of the nervous centres is as various as their volume. In general, they are developed in the same subject in small number only. We often find a single tubercle occupying one of the hemispheres, while the rest of the cerebro-spinal axis is free; in other cases they are disseminated; they may be united in one point, or occupy different portions at the same time, as the cerebrum, cerebellum, and spinal marrow; and, in the latter case, we may find the tubercular matter deposited either at one side of the cerebro-spinal axis alone, or situate at both the right and the left sides. It is evidently a point of some importance to ascertain the

State of the Nervous Pulp immediately around

the tubercular deposit; the latter is not always in direct contact with the nervous substance, but is often separated from it by an organized membrane forming a kind of cyst. In many cases the substance of the brain in contact with the tubercle is perfectly healthy. The foreign body being developed in a slow and gradual manner, it does not seem to have exercised any irritating influence on the soft parts around; the nervous matter preserves its normal colour and consistence, and does not exhibit any trace even of congestion. In other cases we find various alterations in the neighbouring pulp; sometimes these are evidently of long standing, such as induration, softening, with purulent effusion, &c.; others, again, are more recent lesions, as, for example, hyperæmia, red ramollissement, inflammation of the nervous substance, &c.

The membranes may be altered as well as the substance of the brain; thus we frequently find tubercular deposit under the membranes, at the base of the brain, and particularly near the fissure of Sylvius; the membranes are often thickened, studded with fine tubercular granulations, or adherent together, or to the cortical substance, like the pleura in many phthisical patients. We may find pus infiltrated round the foreign body, or more or less serous effusion; this latter complication is the more frequently seen, especially in young children. Indeed, we may lay it downas a very general rule, that tubercles of the nervous centres at a certain period of existence produce the disease called

Acute Hydrocephalus;

and it has been clearly established by the researches made at the *Hopital des Enfans Malades*, that the great majority of children affected with tubercular deposits in the brain, or its membranes, are finally cut off by acute water on the brain. The presence of granulations in the pia mater determines a slow inflammation, which, under the influence of various circumstances, assumes an acute character, effusion takes place within the ventricles, and the child dies in a state of coma. Hence we may draw a conclusion of much practical importance. A certain number of phthisical children are cut off by acute disease of the brain. On examining the body, we find the cavities of that organ distended with serous fluid, but if we look more closely, we generally observe either tubercles in some part of the brain, or a quantity of tubercular granulations in the substance of the membranes. These accidental products, then, become a cause of death, not by their immediate action on the nervous system, but by being an occasional cause of the development of inflammation.

It almost universally happens, that whenever we find tubercles in the nervous centres, we find at the same time

Tubercles in other parts of the Body.

This proposition is true, particularly for children, in whom if we find tubercles in the brain, we are sure to find a similar deposit in the viscera of the other great cavities. The exceptions to the above rule are extremely rare, and it confirms the rule established by M. Louis; however, above the age of fifteen years, this is not the case; in the adult person we may have tubercles existing in the brain without their being present at the same time in the lungs; hence, strictly speaking, the law is only applicable to children. So much for the relative anatomy of tubercles in the brain. Now for the

Causes which develop them.

These are evidently the same that favour tubercular deposit in the tissues of other organs; but we cannot dwell upon them here at any length. However, we may permit ourselves to ask a single question, fraught with very interesting consequences, and embracing, perhaps, one of the most important points in the history of disease. Do tubercles of the nervous centres become developed under the influence of an irritating cause? Do we find them, after inflammation of the brain or of its membranes? Do we observe that they are produced as an effect of external violence, or various other causes of irritation? No; a thousand times, no; on the contrary, they are developed in a slow and gradual manner; the deposit of tubercular matter in the brain or meninges, may and often does go on for years without giving rise to the slightest trace of irritation or inflammatory action, in the organs and tissues by which they are surrounded. We certainly may find tubercles, as well as other accidental products, accompanied or even preceded by inflammation or irritation of the part in which they are situated; but

these latter actions are far from being a constant, although they are an occasional cause. This is a matter of every-day experience! How frequently do we find tubercles, and particularly in young children, deposited in the substance of the brain! Yet it is impossible to discover that the surrounding nervous pulp has been the seat of inflammation, nor does the previous history of the little patient afford the slightest proof of his having ever laboured under the symptoms of cerebral irritation.

Tubercles of the nervous centres are not equally common at all

Periods of Life.

They are much more frequently observed during infancy than at any other period; thus you may frequent the wards of an hospital exclusively destined for adult or old patients, for many months, without meeting with a single example of tubercles in the cerebro-spinal axis; while, in all probability, if you spend a year at the *Hopital des Enfans Malades*, you will have many opportunities of observing this accidental product in all parts of the nervous centres. These tubercles, however, are not developed with the same frequency at a very early period of existence. In new-born children they are rare; from birth up to the age of twelve months, we may also consider them as rarely occurring; but after this latter period, in children who have passed one year, we begin to observe them more frequently, and from two years up to eight, ten, or twelve, we see the greatest number of cases; after twelve years of age, the frequency of tubercles in the nervous centres begins to diminish, and after puberty they again become very rare. Advanced age does not, however, guarantee an individual from the presence of these accidental productions. They have been found after the middle period of life, at forty, or fifty, and even at sixty years of age; but cases at so advanced a period of existence are extremely rare.

The Symptoms

which accompany the development of tubercular deposit in the nervous centres, are very diversified and various. In a great number of cases they do not give rise to any sign whatever. Many children die without having manifested during life the slightest disorder of the nervous system, without having presented any symptom connected with the brain or its functions, yet, in whom, notwithstanding, on examining the body after death, we find one or more tubercles embedded in the substance of the cerebrum. On the other hand, the existing tubercles may be accompanied with more or less functional disorder, and then we find the symptoms presenting themselves under a variety of forms. Thus, in a certain number of cases, the child who from infancy upwards seemed to have enjoyed good health, without suffering under any disturbance of the intellectual or moving powers, is suddenly, without any appreciable cause, seized with grave and violent symptoms; he is attacked with a convulsive fit resembling epilepsy; the accesses are repeated at longer or shorter intervals, coma then supervenes, and the child dies in a state of unconsciousness, or in the midst of general convulsions. After death we find tubercles in the hemispheres of the brain, or in the cerebellum. In other cases the symptoms come on in the midst of bad health; the child is weakly, and of a cachectic appearance; he has for a long time complained at intervals of headache, to which perhaps a slight febrile access may be added; the bowels are alternately relaxed and constipated, and the child often complains of his belly; he has gradually become thin, although the appetite does not seem much altered. In the midst of this state, we suddenly observe certain lesions of movement, which are of various kinds; at one time imperfect paralysis, at another, convulsions, &c., depending entirely on the derangement produced in the functions of the nervous system by the presence of the foreign body. Finally, some children present these or other grave accidents once only: the first attack kills them. Thus, you see, we have distinguished

Three Cases under which the Symptoms of Cerebral Tubercles may be observed.

In one the child, previously healthy, is suddenly attacked by convulsive movements, which terminate in coma. In the second, the patient's health has been for a long time feeble, and the symptoms are neither very grave, nor march in a rapid manner. Finally, in the third case, the symptoms are declared and terminate at the same instant, the patient being cut off by the first attack.

Let us take the second case as the most frequent, as affording the ordinary type of this disease. What are the symptoms which we observe there? The first and most remarkable is headache, which either constantly torments the patient, or only comes on at certain intervals, and in an intermitting manner; in some children this is the only functional disturbance that we observe for a length of time, the pain in the head returns again and again, in spite of all our efforts to guard against its recurrence, and betrays the presence of tubercles in the cerebral substance; in other patients we see various lesions of motility; the child drags one of the lower limbs after him, or is affected with convulsive movements in different muscles; in a word, motility is variously modified, according to the degree of compression or irritation that exists in the surrounding nervous pulp; the tubercle, acting in these cases as a foreign body, produces congestion in some, in some ra-

mollissement, in others true inflammation of the brain, and the symptoms thus often depend more on the complications which accompany tubercle, than on the actual presence of the accidental product itself in the brain.

These symptoms may be either constant or intermittent; when they manifest themselves in a constant manner, we may have either weakness of the muscular power, paralysis, or convulsions; in other cases the symptoms are intermittent, and then we find the patient attacked from time to time with fits closely resembling an epileptic access. The intellectual faculties are variously modified; in several cases they remain intact; in others the intelligence is more or less troubled; the memory is weakened and the speech embarrassed. If we turn our attention to the phenomena afforded by nutritive life, we find that there tubercles of the nervous centres give rise to frequent accidents; the most striking of these is vomiting,—vomiting of an obstinate nature, which recurs again and again, unattended with signs of gastro-intestinal inflammation, but evidently connected with some disturbance of the sensorium.

These are the principal accidents that occur with tubercles of the cerebral hemispheres, and if we consider these symptoms in their *ensemble*, we shall find them presenting themselves under two chief forms, to which all the rest may be reduced—viz. constant headache, with paralysis of the limbs, or headache coming on at uncertain intervals, and attended by convulsions. Let us now turn our attention elsewhere, and see whether tubercles, seated in other parts of the nervous centres, give rise to a different set of symptoms. Tubercular masses have been found

Occupying various Parts of the Mesocephale (the *pons varolii*). What were the symptoms observed in those cases? Nothing special; the presence of a foreign body in the pons was not announced by any symptom differing in a notable manner from those already mentioned. In one case, recorded by M. LARCHET, chorea existed, with tubercular deposit in the pons varolii. Tubercles are also frequently met with

In the Cerebellum.

We possess numerous cases in which this organ has been the seat of tubercular secretion; we have made an analysis of twenty cases, in which the tubercles were strictly confined to the cerebellum, and shall now proceed to lay before you a brief account of the results we obtained. In seventeen of these twenty cases, headache, occupying the occipital region, was the predominant symptom of the disease. In one case there existed a constant vertigo, or giddiness; the symptom was very strongly marked, and whenever it became violent, the individual fell suddenly down in a kind of fit, but without loss of consciousness, or foaming at the mouth. In only one single case do we find a modification of the general sensibility mentioned: there the whole skin, towards the end of the disease, became very painful: the least touch of the skin covering the limbs and trunk was followed by acute sensation of pain, but perhaps this exaltation of the cutaneous sensibility depended upon the presence of partial meningitis rather than from any action exercised by the tubercle itself. In the twenty cases which we have examined, the sense of seeing was either lost, or more or less weakened, in seven patients. We do not find that the tubercle occupied any particular seat in these seven cases of complete or partial amaurosis; sometimes the foreign body was situate at the superior surface of the cerebellum, sometimes at the inferior surface; now in one lobe, now in another; or it occupied the very centre of the organ. Hence we are unable to explain the loss of sight by localizing the disease to any portion of the cerebellum; but we cannot enter again into this question, which was disposed of in a former part of our course. In a great majority of cases the intellectual faculties did not present any modification worthy of notice. In five we find the intelligence was more or less enfeebled, but in all the rest it remained perfectly intact until within a few hours before death. The faculty of motion is troubled much more frequently by the presence of tubercular deposit in the cerebellum; in eight of the twenty cases, we find paralysis more or less complete. In some cases the loss of motion was confined to one side of the body, constituting hemiplegia; at other times the members on both sides of the body were attacked, and principally the lower extremities, while the superior had merely lost a part of their accustomed force. In one case, where the foreign production was of very great size, the four limbs together were almost completely paralyzed. These, then, are the principal modifications which the paralysis presents, and when we have not complete loss of motion, we find that the patients are affected with more or less muscular debility or with convulsions. The latter symptom is by no means an unfrequent one. Thus, in seven cases, we find violent convulsions, and here the access was sometimes so severe as to produce loss of consciousness, and all the symptoms of epilepsy.

We saw a little while ago how tubercles situated in the hemispheres of the cerebrum very frequently gave rise to a disturbance of the functions of nutritive life, amounting to vomiting, or constant nausea. The same phenomena are seen in cases of tubercle occupying any part of the cerebellum. In eight cases out of the twenty, we find

vomiting mentioned as a predominant symptom; sometimes it was very obstinate and frequently repeated; at others, the functions of the stomach were only troubled from time to time; while, in other cases, again, instead of vomiting, we find constant nausea. It is impossible to connect this symptom with any special lesion of the cerebellum. And remark how vomiting very frequently exists as a sign of various different maladies of the nervous centres: there is probably some change in the nervous organization which would explain why vomiting is present in certain cases and absent in others; but the conditions have hitherto escaped our notice. We presume the existence of different states or causes, when we see the production of different phenomena or effects, but these causes are unknown to us, as are also those intimate changes of organization which, being superadded to identical lesions, render their effects so various and diversified.

As to the influence of tubercles of the cerebellum upon the reproductive apparatus, we find only a single case mentioned. Here the middle lobe was occupied by a tubercular mass, and the individual is described as having been excessively given to women. tant, *Journ. Univers. et Hebdom.* t. 7, p. 164, &c.)

In the greater part of the cases quoted,

The March of the Disorder

is slow and chronic. The symptoms are not very severe, but they progress gradually, and are from time to time interrupted by an access of acute phenomena, such as convulsions, epilepsy, delirium, &c. After tubercles have been developed for a certain period in the nervous pulp, giving rise to the symptoms above described, they generally determine a disorder of a more grave character. Thus we generally find that patients who labour under the signs of tubercles in the brain, are sooner or later seized with meningitis, or acute hydrocephalus, and die in a state of coma, or with convulsions. This is the most ordinary termination of cerebral tubercle. The individual is cut off by the attack of some acute malady, and not by the original disorder under which he suffered. Let us now pass to the history of tubercles when seated in the spinal marrow.

Tubercles of the Spinal Marrow,

like tubercles of the brain, are much more frequently observed in children than in adults. However, we possess a few cases of tubercle of the chord in the adult, and even in persons advanced in life. Thus tubercles have been found in the spinal marrow of a person sixty years of age. The foreign bodies seated in this portion of the cerebro-spinal axis commence usually by giving rise to a series of symptoms that we can refer either to compression or irritation of the spinal marrow. You can easily understand how this is the case, and how from these two main circumstances must result various lesions of sensibility or motility, according as the anterior or posterior columns may be affected, according as the tubercle may press upon a different region of the chord. In certain cases tubercle of the spinal marrow when situate near the middle portion, or between the cervical and dorsal regions, may give rise to symptoms of hemiplegia. You will see a case of the latter kind in the *Archives Generales* for April 1834, p. 606, which was communicated by M. Eager, interné at the *Hopital des Enfans Malades*, to the *Anatomical Society*. In this case, two small tubercular masses occupied the posterior portion of the spinal marrow, two inches four lines below the point where the annular protuberance joins the medulla oblongata. The nervous substance round the tubercles was very much softened, and reduced to a pulpy state. The subject of this case, a girl thirteen years of age, after various symptoms, such as headache, embarrassment of the speech, deviation of the tongue, &c., was seized with a weakness in the upper and lower extremities on the right side of the body, which in the course of ten or twelve days terminated in complete hemiplegia.

When tubercle of the spinal marrow has continued to exist for a certain length of time, the functions of nutritive life become affected, as in cases of ramollissement. The respiration and deglutition are, at first, difficult; then become more and more embarrassed, and the patient finally dies in a state of asphyxia, or gradual exhaustion of the forces.

We have now brought to a close our history of tubercles of the nervous centres. It only remains to notice cancer of the brain and one or two other accidental productions, and we shall have finished the description of all those diseases of the cerebro-spinal axis which consist in an appreciable change of organization.

NORTH-LONDON HOSPITAL.

CLINICAL LECTURES

ON

DISEASE OF THE HIP-JOINT.

DELIVERED IN 1836.

BY MR. LISTON.

LECTURE II.

In reviewing what I have already said to you, you will recollect that I explained the signs of the disease in its first stage,—the symptoms which attend it, such as the pain referred to parts distant from the affected joint; and I endeavoured to account for these, and also for the signs and appearances. I stated, that in consequence of the patient, probably long before the nature of the disease was unfolded, resting on the unaffected limb, the affected one became considerably elongated, and that upon examining the bones of the pelvis, and comparing them with the spinous processes, you would find the bones on the affected side depressed considerably below the corresponding bones on the sound side. But independently of this apparent elongation, attributable to the relative position of the ossa innominata, you find that there is a real lengthening of the limb; and this, I endeavoured to impress on you, does not arise from the pressure of the effusion into the socket of the joint, as has been supposed, but from the paralyzed state of the muscles, from the muscles being thrown out of use, and from their not acting so as to keep the diseased surfaces of the joint in contact.

I mentioned that this stage of the disease might exist for a longer or shorter period, and that then it would give place to a different state, namely, to a shortening of the limb. This I endeavoured to show you arose from the changes which took place on the head and neck of the thigh-bone,—from those parts being diminished by the action of ulcerative absorption, and also from a corresponding alteration of the cotyloid cavity itself. These facts, illustrated by several preparations on the table, I showed you, more especially the preparation which I now have in my hand, which exhibits remarkably well these alterations of the articular apparatus, and of the bone. In this instance there was a shortening to the extent of about two inches; but yet, as I said before, the bones retained their relative positions, one with another, and what remained of the head of the bone, continued to occupy its place in the cotyloid cavity. The shortening here, therefore, took place entirely from the change in the state of the bone, and not from any dislocation.

Now it is necessary that you should be able to distinguish this disease from others which affect the hip and limb. There is

One Affection with which it is very apt to be confounded,

a paralytic state of the muscles of the lower extremity; and this takes place generally during infancy, as a consequence of the irritation arising from teething. This paralytic condition generally affects but one of the limbs; and one of the lower limbs is more frequently the subject of it than the upper. The limb becomes paralyzed,—permanently paralyzed, though it may be deprived of the power of motion only to a certain extent. It shrinks away, becomes exceedingly supple, and does not grow with the other limb, or in proportion to other parts of the body. It grows to a certain extent, but is always, to a degree, useless. In such cases the articulations are not fully developed. The head of the femur is not kept in close contact with the os innominatum. The motions of the parts are imperfect. The acetabulum is not fully formed. The ligamentum labri cartilagineum, as it is called, is wasted; and you find, if the patient throws any weight on that limb, if it happens to be moved or pulled about rather freely, that occasionally the head of the bone slips out of its situation.

Now this disease has occasionally been mistaken for hip-joint disease; but by observing it, and attending to the time at which it occurred, it in all probability has followed some convulsive fit, and while the patient was only as yet two or three years of age, the affection never having been attended with pain, and the limb never elongated, you may easily distinguish it from hip-joint disease. This affection has been described by DUPUYTREN, in the book compiled from his clinical instructions, under the term "original dislocation of the femur." There is no doubt but that what I have now stated, is the proper explanation. I have seen one original dislocation, but it was obtained from the dissecting-room, therefore very little, or rather, nothing, was known of the history. In that instance the cotyloid cavity was exceedingly small, and the head of the femur lay on the external iliac fossa. There are several cases given by DUPUYTREN, and I have not the slightest doubt that they were produced as here described. I am supported in the opinion here advanced by the highest surgical authority, not in this country only, but, I think I may safely say, in the world,—namely, that of Sir ASTLEY COOPER. Again, it is said that

Psoas Abscess has been mistaken for Hip-Joint Disease,

but a very little attention will enable you to distinguish between the one and the other. The patient will experience lameness in psoas abscess; he will experience pain in abducting the limb, or in rotating it outwards, and he will, in progression, bend the body on the thigh. In fact, upon the limb being put into any position that stretches the psoas and iliacus muscles, he will suffer pain. The pain may extend down the course of the crural nerve; it may be in the knee, perhaps along the skin, or even in the ankle. The abscess forms, and makes its way to the surface. There is abscess also in the case of hip-joint disease, but psoas abscess presents in a different situation. It falls down, and presents pretty low in the upper third of the thigh, and under the pubic portion of the fascia lata. Sometimes it presents in the loins, and now and then it falls down and presents by the side of the rectum. In fact I have seen cases in which it has presented in all the three places at the same time. The abscess in hip-joint disease generally presents on the outer side of the hip or thigh. Now and then, where the bottom of the acetabulum is perforated, the abscess finds its way into the cavity of the bowel; and it will depend upon whether the fascia is destroyed or not, whether it will then fall down or make its way into the bladder, the vagina, or the rectum, by the side of the viscera of the pelvis. Here is a preparation showing the destruction of the whole neck of the thigh-bone, with great ulceration of the cotyloid cavity, and there are, you perceive, two perforations of that cavity. One of these perforations led into a sinus which communicated with the bowel, and through which the matter for a long period discharged itself. It is not a very common occurrence that the contents of the abscess should, in this way, make its passage into the bowel, and still more rarely into the vagina. There is

Another Disease with which Morbus Coxarius is confounded,

now and then,—one of a very serious nature, and that is, a degeneration of the articulating apparatus connecting the sacrum with the os innominatum on one side; and it will require great attention on your part, and considerable experience of these cases, before you will find yourself capable at once of distinguishing them at the first glance, and forming a correct diagnosis betwixt the one disease and the other. In the latter, the patient has a difficulty in resting upon one limb. In the limb corresponding with the diseased sacro-iliac-synchondrosis, he complains of pain shooting along the limb, and perhaps of pain in the knee. *He walks very erect*, lifts his feet but very little from the ground, so as to avoid jarring. It is impossible for him to bend the body in any way whatever without excruciating pain. But upon examining the limb, you will find that the pain is not aggravated by abduction, or rotation outwards,—by any pressure on the trochanter,—counter pressure being made on the opposite one, or on the end of the femur, or upon the femur, through the medium of the bones of the leg, which is the case, as you know, in hip-joint disease. The principal circumstance that will strike you in this case, will be the perfectly erect gait of the patient. He walks, indeed, bending the body very much backwards, and feels a disinclination to move either limb very far forward. There was one case of that sort in this hospital, in which I pointed out the nature of the affection, but we had only just time to see it before the patient, a boy, was seized with small-pox, of which he died. The dissection, however, verified my diagnosis. We found an extensive disorganization, not only of the cartilages and ligaments connecting the bones at the sacro-iliac synchondrosis, but also of the bones themselves. I am sorry to say, upon looking over the records of this hospital, that this case is not to be found among them; and what, perhaps, is still worse, the morbid parts are also lost. How all this came to pass I do not know, but the inconvenience and annoyance now occasioned by neglect and idleness, show how careful any of you will require to be in this respect, if you should come to fill the office of house-surgeon. There is no blame in this matter attributable to the present house-surgeons; but then, gentlemen, those who happen to succeed them, ought to be aware that they have duties to perform, not to the patients only, but to the pupils, to those in attendance at the time, and those who come after them, and through them to the public at large. I shall take pretty good care that such a circumstance does not occur here again. You are aware of one means of prevention which I have adopted latterly, of having the case books brought into the wards at certain periods, and regularly overhauled, remarks being made as to the circumstances detailed therein; this shall be continued as a check. So much, then, for this digression.

I may mention to you that, now and then, pain referred to the hip and to the knee, and even wasting of one of the limbs, from disuse, will occasionally arise, in consequence of disorder of the digestive organs, from irritation in the intestinal canal, from the lodgement therein of sordes, or worms. The pain may be referred to the course of the sciatic nerve, or the anterior crural; and the muscles may all shrink to a certain extent. But by putting the digestive organs into a proper condition, by driving the worms out, or evacuating the sordes, the patient is again restored to health, and the

limb becomes vigorous, and the muscles regain their former condition and development.

Terminations of Hip Disease.

You will find that the resources of nature, in repairing the effects of this disease, and, indeed, in repairing the effects of disease or injury in any part of the human frame, are infinite and wonderful. You will find a natural cure, perhaps assisted by the efforts of the surgeon, taking place in a variety of different ways. You have in some cases, even where the cartilages have been pretty extensively destroyed, a healthy action of the sore set up, and cicatrization follows. I have here a specimen from a patient who had laboured under hip-joint disease three or four years prior to her admission into the Edinburgh Hospital, and recovered. The covering of the head of the bone is completely cicatrized. The patient was seized, in consequence of a fall on the joint which had been diseased, with violent acute inflammatory action; it was allowed to gain ground before means were taken to subdue it, and she perished; the immediate cause of death was found to be a violent attack of inflammation of the os innominatum around the articulating cavity, and the formation of an abscess within the pelvis. By examining this preparation you will observe that the head of the femur, though greatly diminished in size, and altered remarkably in form, in consequence of extensive disease of the articulation at a former period, is entirely covered over by a healthy cartilage—a cartilage which is just as useful and as healthy as the original tissue—the limb was in this case considerably shortened.

We find, again, that the disease will terminate in a growing together of the two bones. Both surfaces of the bones are extensively destroyed, as you may observe in some of these preparations; and provided the parts within the joint take on a healthy condition, and are kept quite steady, then an anchylosis will be the result. You find here specimens of complete and firm union of the os innominatum with the femur. This is a sort of termination you are to look to after the second stage of the disease has been established, and after the limb has become shortened to a considerable extent.

Again, an alteration takes place upon the head of the bone to this effect, that after the limb has been diminished to a very considerable extent, the surfaces become healed over as it were, and upon the surface both of the diseased os innominatum and femur, there is deposited a dense substance, which is capable of taking on a very smooth polish. In consequence of this a considerable extent of motion of the limb is afterwards allowed. This is more apt to take place when the disease occurs at an advanced period of life. We find in a great many specimens, that without any great diminution in size of the head of the bone, and without any ulcerative absorption of that part, this dense deposit takes place, having a high polish. This condition of parts may follow upon a contusion or injury of the trochanter. It is apt to take place, and indeed generally does, in persons of rather advanced age. By some it is described to be a disease of old persons—the morbus coxæ senilis. But it does not take place in very old people only, as I stated to you in my last lecture on this subject.

Now you will find in some of these cases a great deposit of new matter all around the acetabulum. The ligamentum labri cartilagineum, as it is called, is either destroyed, or converted into this osseous tissue. In some cases it is so to a great extent, so that the parts are firmly fixed together, as in the specimen now before you, and it is impossible to separate them even by long maceration—after removing entirely all the soft parts. Indeed I have seen the head of the thigh-bone confined to the os innominatum, in such a way that it was utterly impossible to separate them.

Again, as a termination of hip disease, dislocation may take place; but this, as I have tried to convince you, is indeed a very rare occurrence. I have seen but very few such cases, and one of them is now upon the table. These bones must have belonged to a patient past the age of puberty. Here you observe the head of the femur has slipped out, and become dislocated upwards and backwards. This form of dislocation may be favoured by the position in which the limb is allowed to get; and we were very much alarmed only the other day lest we should have a dislocation of this sort in one of the patients in the house. The patient I allude to is a boy named William Ellison, aged seven, and the history of his case is, that he received an injury of the right hip two years previously, from being pulled out of bed by his leg. Soon after, pain began to be complained of in the thigh, but not in the knee, and gradually became more severe; an abscess formed on the outer side of the thigh, near its middle, and was discharged. Very little treatment has been adopted, and motion has been permitted during the whole course of the disease. There is now considerable shortening and wasting of the limb, and some fulness over the trochanter major. The patient was confined to bed, and owing to some complaint of pain the house-surgeon applied a blister on the groin. In consequence of the application of the blister, the patient put the limb into a very awkward position; he got it fixed in such a position, so firmly, that it was found almost impossible to alter it without unjustifiable violence, and I was very much afraid that the head of the bone would have slipped out of the acetabulum.

We have, however, got over this danger, and have succeeded by gradual efforts in getting the limb extended, and fixed on a splint. Through the kindness of Sir Astley Cooper, I saw a consecutive dislocation of the head of the femur yesterday, obtained from a young subject. There had been very little change in that case in the head of the femur; there is very little diminution of its size; there is no mark of disease whatever in the bottom of the acetabulum; it is very shallow, and has not the least appearance of ulceration. The synovial and fibrous capsules of the joint at the upper part have apparently yielded, and the bone slipped out on the dorsum of the ilium. It, at first sight, looks very much like one of those specimens obtained from a case of paralysis of the limbs, where the acetabulum had never been fully formed, and where the bone had slipped out in consequence of the patient having received some twist of the limb, suppuration, and disease of the head of the bone having followed the displacement. It appears, however, that the patient had complained of symptoms of hip-joint disease, and that previously the limb had been sound and serviceable.

Treatment.

Now, what are we to do to prevent these occurrences as morbus coxarius advances,—ulceration, shortening of the limb, anchylosis, or dislocation?

In the first place, having ascertained with certainty that the disease is one of the hip-joint, by a careful examination of the signs and symptoms I have described, you will endeavour to put the parts into a state of complete rest. Depend upon it, that that measure is the most indispensable part of the whole of the treatment. Perhaps by doing so, by careful and repeated hot fomentation, and by attending to the state of the digestive apparatus, nothing more may be required. But if the pain be very severe, where, perhaps, the disease may have been neglected for a considerable time, or where the patient may have received a severe twist of the limb, or a bruise upon the joint after the disease has been for some time in progress, then you will have to resort to pretty powerful antiphlogistic measures. The majority of patients, however, labouring under this malady, cannot bear such treatment to any very great extent. You will then have to confine your antiphlogistic means to the local abstraction of blood, by the application of leeches in sufficient numbers to the neighbourhood of the part behind the trochanter or in the groin, following that up by fomentations, assiduously and efficiently applied, and, if need be, by one or more blisters, with a view of promoting a determination from the affected part. Along with such means, it may be necessary to exhibit some medicine calculated to determine to the surface, and which will assist your local means. You may give the antimony in combination with morphia, as we did in a pretty acute case that was admitted here the other day; you may give the extract of aconite,—a medicine, so far as I have seen, very active in subduing the force of the circulation. It is even more powerful, and more to be depended upon, than the antimonial preparations. It must be given in very small doses, and repeated. It is a very powerful sedative, and one that has a direct action on the heart and vessels. Its exhibition is generally followed by gentle perspiration, and by well-marked diminution both of the frequency and force of the arterial pulsations. We use it in a good many cases here, and I think, that by the employment of it we have obviated the necessity of abstracting blood in many cases.

But without absolute rest, it is of no manner of use to have recourse to any treatment at all. We admitted a case the other day,—one of the cases in the private ward,—which had been subjected to a great deal of treatment, and, I should say, with judgment, but to no effect. Why? She was a patient at a dispensary; she was carried backwards and forwards to the dispensary, and examined there from time to time, and the joint was not kept in a state of repose. She was at last brought here, and now we shall take care that that essential part of the treatment is strictly enforced.

Well, now, after having soothed the parts, and allayed the inflammatory action in some measure, it will be necessary, if any pain of the knee, or the leg, or the ankle continue,—if the disease do not seem to yield,—if the unnatural lengthening do not seem to go off,—and if the limb do not put on a more natural appearance,—it will be necessary to keep up some sort of discharge from the neighbourhood of the joint. You would not think of applying an issue in front, in the course of the great vessels and nerves. The most suitable part is just behind the trochanter, and you will establish the discharge either by the insertion of a seton, or what is better, by the application of a bit of potassa fusa. In that way you can make the issue as large and as permanent as you please. By applying a piece of potass of the size of a split pea, confining it in its place by a bit of lint and plaster, a slough is formed, varying in size from the disc of a shilling to that of a half-crown, in a few hours, without any great degree of suffering; and after the separation of the slough, when the wound exhibits any tendency to heal, you can easily refresh the issue by the application of a little of the antimonial ointment, for a few hours. This proceeding is very much to be preferred to the use of the heated iron or moxa,—means, no doubt, that are effective enough in producing excitement on

the surface, or derivation from the joint by a discharge. But those applications are always alarming to patients, particularly to young subjects, and I think you can always effect your object equally well by having recourse to less alarming means, therefore I would not resort to them myself, nor advise you to do so. The mode of managing the issue also is preferable to the insertion of pens; it is more effectual, and by far less troublesome.

Now the nature of this disease, and the necessity of establishing an issue for its cure, were very well known long ago. There is an aphorism of HIPPOCRATES, in the sixth section, which states that, in those cases where patients have been long troubled with pain in the hip, the hip falls out, the leg wastes, and the patients become lame, unless they are *burned*. That is the gist of the aphorism. But you must not carry this counter-irritation too far, lest, in that way, you defeat your object. If you carry it too far you may disturb the system, and weaken the patient's general health. Continue it only so long as the patient endures pain; then, by confining the patient to bed, and promoting motion of the parts, you will attain your object, and prevent the disease from getting into its second stage.

You are aware, that in the case of one of the patients whom I have just mentioned, we have employed a splint, which seems to answer uncommonly well. It has been the custom for sometime, with some practitioners, to plaster up this and other joints; to have recourse to a system which has been practised pretty extensively and very indiscriminately, that of applying all sorts of mercurial ointments, soap-plasters, adhesive plasters, and so on, in order to keep the joint quiet, and get rid of the swelling. It is a practice which answers very well where the disease is chronic, and exists principally in the synovial membrane of a joint; but where the disease is seated in the cartilages, and has invaded the osseous tissue of the joint, no good can result from it. You cannot apply your plasters in such a way as to confine the motions of the joint, without drawing them very tight; and if you do apply them in such a way, you will find that you squeeze the surfaces of the diseased bones too closely together. You will attain the desirable object of putting the parts at rest without any risk, by the use of such a splint as we applied the other day, and which we mean to employ in some other cases. It is composed of slips of lint—the patent kind answers best for the purpose—dipped in a strong solution of gum arabic, which is laid upon the parts previously greased—several layers of dry lint are added, and the whole is confined with a bandage. When the composition dries, a firm case, composed of thin layers of lint, and turns of the roller, is formed, exactly fitting the parts, extending from the knee to the false ribs, embracing the joint completely. That case can be taken off and re-applied, trimmed neatly at the edges with clean bandages. It can be fashioned in such a manner as to allow the escape of any discharge that may proceed either from abscess or an issue. It has been proposed to perform operations on this joint to divide the neck of the bone, so as to leave the head quiet in its natural situation, and even to cut out the head itself. From what you have seen and know of the pathology of this disease, you could not be induced then to hearken to such proposals.

After the pain has gone off, and the cure seems to be advancing, the patient need not be confined to bed; he may get up, be put upon crutches, enjoy exercise to a certain extent out of doors, and thus have his general health improved and his strength restored.

In the second stage very often abscesses will form, and you must not be in too great haste to open those abscesses. You will find it alleged in some old authors, that in all cases of joint disease, where abscess has formed and *dislocation has taken place*, that there should be no delay in evacuating the matter or the synovia, its presence being looked upon as the cause of the whole mischief. It is so stated in the book which I have now got in my hand. "This being a true description of the joint," says our author, "I need say no more than treat of the worst sort of diseases which affects any joint, and that is of a luxation of the head of the *os femoris*. I do not mean a dislocation caused by a violent accident, but from a humour formed in the *acetabulum*, which corrodes the head of the *os femoris*.

That there is some such extensive accumulation and deterioration of the synovial fluid, as to push the bones from their natural situations, or to corrode the head of the femur so that it may slip out, seems still to be so far the opinion of some modern practitioners; and, under this false impression, early openings have been advised and inculcated. But you will find great injury may be done by such a practice. You may establish, as I think Sir Astley Cooper has remarked in his valuable lectures on surgery, published in THE LANCET, an opening between the interior of the joint and the external surface, and you all very well know the bad consequences that must result from that.

Many of the abscesses form in the articulation itself, and others in parts exterior to the articulation; but you will see in several of the specimens now before us, that there are probes passed from the articulation through sinuses which lead to the external parts, and that there are in some of them two or three such openings through the capsule. In the patient we dissected lately, you found that

the large abscess in the soft parts communicated with the joint, had probably formed in it, and that the acetabulum was altogether in a very degenerated state. There are several specimens now before you, where the acetabulum is destroyed and perforated, the ravages of the disease being much greater and more apparent on this part of the articulation than on the femur.

When the abscess has attained a very great size, and when the integuments have become thin and discoloured, you may then give the patient relief by making an opening. In the second stage you have nothing to do but to secure the limb in a good position, and to enjoin rest; and certainly, after an abscess has formed and is discharging, there can be no earthly necessity for your establishing additional drains, by the introduction of setons or insertion of issues. You would run the risk of producing great constitutional disturbance and irritative fever. The discharges from those abscesses are very often rather a favourable occurrence than otherwise; they are a sort of natural issues, they relieve the symptoms. When the limb is got into a favourable position, with the aid of a high-heeled shoe the patient may afterwards be able to progress comfortably enough. I don't know, gentlemen, that it is necessary for me now to detain you longer by saying more on this subject; I think I have communicated my views upon it to you pretty fully.

EXAMINATION OF FIESCHI'S HEAD.

PROCES-VERBAL, *by* M. LELUT, *Physician at Bicêtre.*

THE phrenologists on the other side of the water are in open controversy with their opponents as to the results obtained from the examination of Fieschi's head. We are enabled to lay a detailed account of the principal circumstances connected with the autopsy, from the pen of M. Lelut himself, before our friends who interest themselves in phrenological matters, who will thus be enabled to form an independent judgment on the subject.

Section of the Neck, &c.

The knife had divided with the utmost precision, the spinous process of the sixth cervical vertebra alone, and the intervertebral substance between the fifth and sixth vertebræ of the neck. It then divided the larynx at the inferior part of the thyroid and cricoid cartilages, and passed out close to the chin.

Measurements of the Skull.

	Inches.	Lines.
Great circumference	20	5
Anterior demi-circumference	10	5
Posterior demi do.	10	3
Longitudinal diameter	7	3
Frontal ditto	3	10
Temporal ditto	5	6
Inter-auricular ditto	5	2
Intermastoid diameter	4	1
Sincipito-mental ditto	9	0
Height of the face	3	11
Ditto of the skull, measured from the level of the external auditory foramen	4	5
Superior circumference, from the root of the nose to the external occipital ridge	10	5
Superior circumference, taken at the level of the external auditory foramen	10	0

The forehead is moderately developed, and the facial angle also moderate. The cranium is very long, and the temples are remarkably flattened.* They do not present any trace externally of the organs of *murder*, "*ruse*," or *prudence*, but the organ of *theft* is very well marked on the superior median line. The organs of *benevolence* and *theosophy* are evident. The organ of *firmness* is not well marked, and that of *vanity* and *pride* is still less so. The same remark applies to the organs of *courage* and *attachment*. The superior occipital fossæ, which correspond with the posterior lobes of the cerebrum, are very largely developed. The skull is three lines thick at the frontal bone; the temporal is two lines; the occipital is two lines.

Lesions of the Skull and Face, resulting from the Wounds received on the 28th of July.—The cicatrix on the right side of the chin, involving the lower lip, directed obliquely from above downwards, and from within outwards, firm, and white, and having a much older appearance than it ought to have, considering the period of time elapsed; it extends along the neck, as far as the edge of the cut made by the knife. The jaw-bone is not fractured beneath; however, there is a slight loss of substance near the mental foramen. Above the external angle of the left eyelid there is a cicatrix perfectly formed, about seven to eight lines in diameter, and very deep. Above, and in front of the left temple, is another cicatrix, nearly as large as the former, very irregular, and not quite completed. It is deep, and forms a species of canal directed obliquely upwards and backwards; at its superior angle the skin is elevated by an osseous eminence.

* We should remark that Dr. GAUBERT, who was present at the examination of the head, does not agree with the description given by M. LELUT of the different organs; the account given by the former is much more favourable to phrenology.

The first of these two cicatrices corresponds with a wound which destroyed a portion of the frontal bone and orbitar wall; two small osseous fragments are still moveable. The open part, communicating with the cavity of the skull, is four or five lines broad, and ten lines long; opposite it, and all along the left anterior lobe of the cerebrum, the two layers of the arachnoid are united by short, firm, filamentous bands. Here the surface of the brain presents a slight alteration, that will be presently noticed. The temporal cicatrix corresponds with an opening, irregularly triangular, eighteen lines one way, and fourteen the other. This opening is closed externally by the cicatrix of the integuments internally, not by the dura mater, but by a false membrane, resistant and nearly fibrous, about two lines thick, of a triangular form, and extending nearly two inches in every direction; this pseudo membrane is interposed between the dura mater and bone, to which it adheres; the opening, which it closes internally, is formed by a fragment of the parietal bone, of a demi-elliptical shape, two inches three lines in length, and two inches in height; the osseous fragment, situated exactly in the middle third of the parietal bone, extends anteriorly to the frontal suture, whose dentated edge is broken down where the communication with the cavity of the skull exists. Its inferior edge is a little elevated; at all other points it is nearly on a level with the other bones; the fragment is now firmly consolidated on all sides, except at the fronto-parietal suture, but it is evident that at one time it was completely detached. On its internal surface may be seen several inequalities and dentated eminences, which indicate that absorption and consolidation have taken place at the expense of the inner table. Similar inequalities, accompanied by an exaggerated whiteness of the whole substance of the parietal and frontal bones, show that they also have taken part in the work of cicatrization. The anterior part of the opening, where the upper side is bounded by the fragment just alluded to, is circumscribed inferiorly by another osseous fragment, four-fifths smaller than the former, whose base was never separated from the parietal bone, while its point has evidently been driven inwards, and detached from the rest of the bone.

Brain and Meninges.—The brain and its membranes do not present any trace of alteration at the points corresponding with these several injuries. The arachnoid lining the hemispheres, is everywhere transparent; the cellular tissue of the pia mater contains a great quantity of air-bubbles. The membranes are easily separated at all points from the surface of the brain, except near the left anterior lobe, where we said that the two layers of the arachnoid were united by short filaments to each other; here the inner layer, for about the extent of an inch, adheres slightly to the brain; the superficial layer of gray substance has here evidently been destroyed and cicatrized. At the inferior part of this cicatrization is remarked a great number of white radiating lines, which seem to be nothing more than filaments of the cellular tissue, exposed and rendered more evident by absorption of the nervous pulp. On examining this cicatrix with a powerful glass, it appears as if its cellular tissue was penetrated with numerous air-bubbles, in the same way as the pia mater in all criminals who are executed; the air penetrated by the carotid arteries at the moment of section. This is the only point of the whole brain that is in the least altered; everywhere else, even opposite the enormous wound in the temple, it is perfectly normal in colour and consistency. The convolutions are, generally speaking, large, and the anfractuosities deep.

The weight of the brain, preserved a few days in alcohol, is as follows:—

	Grammes.
Brain and medulla oblongata....	1.365
Brain alone	1.200
Cerebellum and medul. oblong...	0.165

It has been remarked that the weight of the brain is considerable, but that the cerebellum, compared with the mean weight in several experiments, seems a little below what it ought to be.

GERMAN JOURNALS.

Medicinische Yahrbücher, &c. Edited by Barons Von Stifft and Von Raimann.

In the four last numbers of this journal, we find the following articles which seem worthy of notice:—

STATISTICS OF THE SMALL-POX DIVISION OF THE GENERAL HOSPITAL OF VIENNA FOR 1834. *By* Dr. J. Ratter.

From this account the number of patients treated for varioloid affections, during the course of the year 1834, was 1002. Of these, 469 were affected with true small-pox, 533 with varicella. Of the 469 variolous patients, 160 had not been vaccinated; 109 bore some trace of vaccination, and 200 had evidently been vaccinated with success.

Of the 160 patients who had never been vaccinated, 82, or more than one half, died. Of the 109 patients in whom imperfect traces of vaccination existed, 40 died, or 1 in 2.70.

The result for the persons well vaccinated is much more favourable. Of the 200 cases, only 25 died, or 1 in 8. This proportion is still high, but may be accounted

for under peculiar circumstances. In six cases the fever was of a violently putrid character, and carried off the patients in the first few days. Nine cases occurred in women who had just lain in, and here the small-pox was complicated with puerperal fever; thus we have only ten cases where death can be justly attributed to the violence of the disease; it took place during the period of exsiccation; all the rest were of a very mild character. Of the 533 cases of varicella, only three patients died, and these were women who had recently lain in. Shortly after the appearance of the eruption, they were all seized with puerperal fever, which soon terminated fatally.

These examples show how dangerous a complication of the puerperal state is any form of variolous disease, however slight it may be. During the whole year, only five puerperal patients escaped of those who were seized with variola or varicella.

CÆSAREAN OPERATION

IN THE LINEA ALBA.

The following case is related by Professor Joh. Kömm:—

J. H., twenty-five years of age, a woman very much deformed, menstruated at the sixteenth year; in January 1823, she had connection for the first time with a man, and the menstrual discharge was suspended; the other symptoms of pregnancy soon appeared, and the patient passed through the nine months without any accident. On the appearance of labour pains she was examined by a midwife, who judged deliverance impossible without manual assistance: a surgeon was accordingly sent for, who recommended her immediate transport to the hospital at Gratz.

On examining the pelvis, its inlet between the promontory and symphysis pubis was found to be so narrow, as scarcely to admit the finger. The impossibility of natural delivery was evident, and as the woman had been six days in labour, it was determined that the cæsarean operation should be performed without delay. On dividing the abdominal wall with the knife, a portion of intestine escaped; this was returned and kept in situ by pressure, with a cloth dipped in warm oil. The anterior surface of the uterus being next divided, a full-grown, though dead child, was extracted, together with the placenta, which was separated and putrid. The operation did not last half an hour, and was accompanied with very little loss of blood. The wound was united by a few stitches, and the woman took an oil-draught. For the first four hours she seemed in a very favourable state, but at the lapse of that period she was seized with violent rigors, followed by acute febrile symptoms. At ten o'clock in the morning, twelve ounces of blood were taken from the arm, which reduced the pulse and fever a little; however, the patient was soon attacked with singultus and tendency to vomiting, and at two o'clock threw up a quantity of dark-coloured bitter fluid from the stomach. The complication of bilious disorder was now apprehended, and the patient ordered

℞ *Decoct. Rad. Gramin.*, ex unc. un., et sem. parat. unc. quinq.;
Oxymel Simpl. unc. un. Weak lemonade for drink.

Towards midday, she became much agitated; the vomiting returned; the wound became painful; the abdomen very tender; pulse weak, small, and accelerated:—

℞ *Aq. Naphthæ*, unc. tres;
Tinct. Anod. s. gut. decem;
Tinct. Castor., scrup. duos. M. d. sigl.

During the night the pain became more violent; vomiting continued. The patient was seized with delirium, and sank on the morning of the 5th of September, at three o'clock.

Autopsy.

The stomach and bowels contained a good deal of air; the uterus and neck of the bladder gangrenous; the other organs normal. The antero-posterior diameter of the pelvis was only one inch and a quarter; the transverse five inches. The spine was curved completely into an *S* shape, and the bones of the lower extremity were equally deformed.

An Inquiry into the Claims of Doctor William Harvey to the Discovery of the Circulation of the Blood; with a more equable Retrospect of that Event. To which is added an Introductory Lecture, Delivered in Vindication of Hippocrates from Sundry Charges of Ignorance preferred against him by the late Professor Rush. By J. R. Coxe, M.D., Prof. in the University of Pennsylvania, Philadelphia. Carey, 8vo., pp. 258.

It is not often that we have the opportunity now afforded us, of examining the literary and scientific productions of our transatlantic brethren; and perhaps Dr. Coxe's work, the characteristic American title of which we have very literally copied, is, if the bond of brotherhood was not very strong between us, not much calculated to induce the desire of a more extended acquaintance. The learned professor has attempted to deprive Dr. William Harvey of the glory of discovering the circulation

of the blood, and to rob England of one of its highest claims to scientific renown. This is an age of inquiry; even Newton and Halley have lately been obliged to undergo a scrutiny, not wholly uninjurious to their moral character; and Harvey, although his fame has remained unshaken through two centuries, has no right to an exemption from a free investigation into, and an adjustment of, his pretensions to the discovery of the circulation of the blood. Therefore, we willingly abandon our national prejudices on the subject, and yield up our unmixed veneration for Harvey, while Professor Coxe submits his merits and his claims to the question.

The subject is treated with very little order in this work, and it is not easy to distinguish accurately what part of Harvey's claims is acknowledged, and what denied, by the author. At one time he asserts that the circulation was known to the ancients; at another he accuses Harvey of slurring over the merits and discoveries of his predecessors; and if he ever admits that Harvey was the first to *demonstrate* the general route of the circulation, he takes care to show at the same instant that the demonstration was in many points imperfect, and mingled with errors in physiology.

Almost all the great laws of nature are the result of successive analytic discoveries; certain groups of facts are formed, according to the several principles by which they are governed, till, on their accumulation, a master spirit shows that they are subject to one universal law. Newton discovered the law of gravitation, but Copernicus, Galileo, and Kepler, had not only invented instruments, and collected innumerable observations, but reduced the phenomena of attraction to three heads, before Newton entered the field; so Harvey carried out and confirmed the truths which had been brought to light, or were dimly seen, by Galen, Cæsalpinus, Servetus, and Fabricius ab Aquapendente, until their legitimate consequences, the counsel of nature, and his genius, made the circulation of the blood an incontestable fact.

To show the real extent and limit of Harvey's discoveries, it is necessary, on the one hand, to determine what was previously known of the matter; and, on the other, what experiments, observations, or reasonings, are properly his own.

At a very remote period of our medical history, when the College of Physicians was the scene of the highest order of medical research and instruction,—when it was as much celebrated throughout Europe for sound science, as it is now in London for tea and theology,—when it was "necessary to write great works," in order to rank as a great man,* Harvey was appointed lecturer on *Anatomy* and *Chirurgery* in that college, and in 1816 proclaimed his doctrine of the circulation of the blood, reserving the publication of his work "De Motu Cordis," until 1628. The 14th chapter of his first Anatomical Exercitation presents a summary of his investigations, which we cite from the English translation of 1673, given by Dr. Coxe, as it agrees exactly with the Rotterdam Latin edition (1654).

"Seeing it is confirmed by reasons and ocular experiments, that the blood does pass through the lungs and heart by the pulse of the ventricles, and is driven in and sent into the whole body, and does *creep into the veins and porosities of the flesh*, and through them returns from the little veins into the greater, from the circumference to the centre, from whence it comes at last into the vena cava and into the ear of the heart in so great abundance, with so great *flux and reflux*, from hence through the arteries thither, from thence through the veins, hither back again, so that it cannot be furnished by those things which we do take in, and in a far greater abundance than is competent for nourishment; it must be of necessity concluded, that the blood is driven into a round by a circular motion in creatures, and that it moves perpetually; and hence does arise the action and function of the heart, which by pulsation it performs; and, lastly, that the motion and pulsation of the heart is the only cause."

Such are the results of Harvey's experimental investigation; which, after explor-

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* "From what do you collect that Dr. Wells was not an eminent physician?"

"I am not very conversant with his papers or his works on physic or medicine; they are not *voluminous*. * * He is not the author of *any great work*."

"You state that he had not written any great work on medicine. *How many of the present Fellows of the College of Physicians have written great works on medicine?*

"*It is not so necessary to write great works* NOW; *the science is advanced so much that it is not to be expected that we should have very voluminous publications.*"—*Evidence of Dr. Macmichael, author of the "Gold-headed Cane," in Evidence before the Parliamentary Committee.*

ing in different classes of living animals the motions of the heart and arteries, the heart's action and function, and the passage of the blood from the *venæ cavæ* through the lungs to the arteries, turns chiefly on the establishment of the three following arguments in favour of the circulation:

1st. The blood is continually transmitted from the *vena cava* to the arteries, in such abundance as cannot possibly be supplied by the food, so that its entire mass passes through the heart in a very short time. Admit that the left ventricle in dilatation contains two ounces, or three ounces, or an ounce and a half, and that at each pulsation, a fourth, a sixth, or at least an eighth, of its blood is ejected, and prevented from returning by the semilunar valves; then as the heart pulsates more than 1000 times in half an hour, a greater quantity of blood would be transmitted in that time through this organ than is contained in the whole body. Consequently the fluid sent from the heart through the aorta, returns by the venæ cavæ.

2ndly. The blood is continually, equably, and effectually propelled into every limb and organ with the pulse of the *arteries*, in greater abundance than is necessary for nutrition, or than the entire mass of that fluid can supply. This is proved by experiment, and by the application of (1) a *tight*, or (2) a moderately tight ligature. If the ligature be applied so as to exert great pressure on the limb, as with the tourniquet, the pulse of the artery ceases below the ligature, the current of blood in the arteries, as well as the veins, is arrested, and the part remains undistended. But slacken the ligature, so as to allow the arteries to beat, while the veins are obstructed, and these vessels become tumid and varicose—the part coloured and distended—in the course of ten or twelve arterial pulsations. Now the blood driven into the hand, where there is a ligature round the arm, as in venesection, must enter through the veins, through certain invisible pores, or through the arteries; it does not enter through the veins, least of all through pores, and, consequently, can only be conveyed by the arteries from the heart. Furthermore, if you ascertain how much blood flows from one arm in venesection during twenty or thirty pulsations, and thence calculate how much flows through the other arm, the lower extremities, the neck, in fine, all the arteries and veins of the body; it will be found that the mass moving through them is not only greater than could be supplied by the ingesta, but far greater than would serve for the nutrition of the parts.

3dly. The blood is constantly brought back to the heart by the veins. This is rendered sufficiently evident from the valves in the veins discovered by *Hieronymus Fabricius ab Aquapendente*, which allow the blood to pass from the smaller to the larger veins, but not to regurgitate. By placing a ligature round the arm, several knots will be seen in the veins, answering to the valves; by putting a finger below one of these knots, and passing the other up the vein till it has been emptied beyond a second valve, this valve will prevent the descent of the blood into the empty portion of the vessel; remove the first finger, and the blood will immediately rush through the lower valve. These experiments may be varied, so as to show the office of the valves, and also that the blood in the veins moves towards the heart.

On these reasons, corroborated by others less direct, Harvey grounded the demonstration of a circulation. Let us now see what had been known and proved by previous physiologists. Servetus, in his "Christianismi Restitutio" (1553), asserted that the blood passes from the right ventricles through the lungs, there becomes florid, is purged of its dregs, and returns to the left ventricle. Colombo (1559) made the same statement, and moreover stated that the valves of the heart let the blood in and out, but not by the selfsame road. Cæsalpinus (1569) gave a still clearer description of the circulation through the lungs, and observed that the veins become turgid beyond the ligature. None, however, can so fairly dispute the discovery of the circulation with Harvey as Galen, whose doctrines we subjoin in an abridged form from Hecker's History of Medicine, with references to his voluminous works, which the curious will do well to consult.

Galen held that the heart was a muscular organ; and that arteries consisted of three coats*, and were destined to receive the blood impregnated with vital air; that by the contraction of the left ventricle its contained blood was forced into the aorta, whence it was prevented from returning by

* De Anatomic. Administr., l. vii, c. 5, p. 151, C. T. iv.

the three semilunar valves†; that from this point the blood flowed along the arterial branches to their extremities, and there emptied itself by innumerable anastomoses into the veins‡. So that the utility of respiration, and of the absorption of vital air, is felt not only by the heart and arteries, but also by the veins§; that the blood brought back to the right heart through the *venæ cavæ*, was carried by the pulmonary artery (φλὲψ ἀρτηριώδης) into the lung‖, taken up by the pulmonary veins (ἀρτηρια φλεβώδης), and thus arrived at the left heart ¶ to pour into the aorta. The structure of the semilunar and the auriculo-ventricular valves he describes most accurately**. The semilunar valves prevent regurgitation of the blood into the heart, the mitral and tricuspid valves prevent the blood from escaping backwards out of the heart. Galen had often observed the heart's movements in living animals; that the contraction of the auricles and ventricles was alternate, the two auricles beating together, and then the two ventricles††. He was perfectly aware of the physical differences between venous and arterial blood.

After comparing the doctrines of Galen and Harvey on the subject, the reader must form his own opinion of their respective claims to the exclusive discovery of the circulation, bearing in mind that Galen preceded Harvey by more than fourteen centuries.

Galen has, in no one part of his writings, given a complete description of the circulation of the blood, nor has he mentioned the valves in the veins, subsequently discovered by Fabricius ab Aquapendente; yet by collecting all the facts previously known, by personal investigation, and by his astonishing acuteness of reasoning, he himself appears to have become acquainted with the course of the blood. Harvey was the first to pronounce the word "circulation;" to follow the blood not only through the lungs, but along the arteries, from the heart to the veins, and thence back through the venæ cavæ to the heart. Harvey was the first who gave a complete and formal description of the course of the blood, who announced the true doctrine clearly, so that it could not be mistaken; and not only stated, but demonstrated, the circulation by direct experiment, observation, and inductive reasoning. So no one individual exclusively *discovered* the circulation of the blood; for, fourteen hundred years before Harvey's day, Galen described the greater part of the track pursued by that fluid, and Harvey's teacher detected the valves of the veins, the only essential structure unknown to Galen; and Galen himself was indebted to Praxagoras, Aristotle, Erasistratus, for several of the most important links in the chain which approached so near perfection in his hands. But if he who carries a process of investigation to its close,—if he who first arrives at an idea sufficiently complete of its object, is to be called a discoverer (and such is usually the case), Galen deserves the honour, as he evidently saw, although dimly and from afar, the real functions of the vascular system. Harvey deserves the honour in a still higher sense, as he actually made himself master of the promised possession of science.

Harvey's views of his own share of the discovery are thus stated in the beginning of the eighth chapter:—

"Huc usque de transfusione sanguinis e venis in arterias, et de viis per quas pertranseat, et quomodo pulsu cordis, transmittatur dispenseturque: quorum forsan aliquis, qui antea sunt aut *Galeni* auctoritate, aut *Columbi*, aliorumve rationibus, adducti, assentiri se dicent. Nunc verò, quæ restant de copiâ, et proventu istius pertranseuntis sanguinis (licet valdè digna consideratu) cùm dixero, adeo iis nova erunt et inaudita, ut non solùm ex invidiâ quorundam metuam malum mihi, sed verear, ne habeam inimicos omnes homines. Tantum consuetudo, aut semel imbibita doctrina, altisque defixa radicibus, quasi altera natura, apud omnes valet, et antiquitatis veneranda opinio cogit. Utcumque sit, jam jacta est alea, spes mea in amantium veritatis et doctorum animorum candore sita."—p. 80. *Exercit. Anat.* Rotterdam, 1654.

Professor Coxe displays considerable research, and no slight acumen, in argument. He merits, on one hand, praise for attracting consideration to the subject, and at-

† De Usu Part., l. vi, c. 14, p. 438, A. B.

‡ De Usu Puls., c. 4, p. 438, D. T. V. Galen held the untenable, but even still existing doctrine, that the arteries, by an active power of contraction and dilatation, contributed to the progress of the blood.

§ De Usu Part., l. iv, c. 17, p. 443. C. De Usu Puls., c 3.

‖ De Anatomic. Administr., l. vii, c. 11, p. 158.

¶ De Usu Part., l. vi, c. 11, p. 433. A.

** Idem. c. 14, p. 437.

†† Id., c. 15, p. 438. Anatomic. Administr., l. vii, c. 15, p. 164. B. Compare De Diff. Puls., l. iv, c. 2, p. 62. E. T. viii.

tempting to give the predecessors of Harvey their deserved honour. On the other hand, he debates the question rather as a captious pleader than as an impartial judge; his hypercriticisms, and insinuations of disingenuousness, nay, of dishonesty, ignorance, and stupidity, against Harvey, are too feeble, or too mean, to permit reply. If Galen, in the words of his great successor, was "vir divinus, pater medicorum," the term *immortal* may still be attached with propriety to the name of Harvey.

We have entered at some length into this historical question, not yet viewed, we believe, in its true light in this country, as the time seemed favourable for its fair and deliberate examination. Besides, the fame of great men is the patrimony of the world, and they well deserve from posterity that just adjudication of their rights, and that due share of glory, which they so rarely obtain from the envy or the passions of contemporaries.

HOPITAL DES ENFANS MALADES, PARIS.

RESEARCHES INTO THE DISEASES OF CHILDREN.

LESIONS OF THE NERVOUS CENTRES.

CASE 1.—*Partial Ramollissement of the Spinal Marrow.*

JULES JANIN, 14 years of age, born at Paris, of a mother affected with pulmonary consumption; is addicted to masturbation; had a confluent small-pox at the age of four years, and still bears the traces; the appearance of the child is strongly marked by the scrofulous character; for several years he has been affected with a muco-purulent discharge from both ears, with diminution of the sense of hearing. The patient had complained of severe pain in the head for several days, when he was admitted into the hospital on the 12th of November, 1835. During the first five days after his admission he did not present any symptom worthy of notice, except pain occupying the occipital region, accompanied by a very remarkable slowness of the pulse; the child was ordered to take two purgative draughts, at three days interval between each, and was allowed the ordinary food.

17. The pulse, which hitherto presented only from 56 to 60 pulsations, rose suddenly to 130; at the same time the respiration became accelerated, and mounted to no less than 80. When asked about the seat of pain, the patient assures us he does not suffer anywhere; the headache has disappeared, and we cannot discover any trace of lesion in the lungs or heart, by means of auscultation and percussion, which could account for the sudden acceleration of the pulse, dyspnœa, and other symptoms; the skin is not more warm than ordinary; the child insists on having something to eat, and asks permission to get up. During the next few days the dyspnœa persists, and the patient experiences from time to time accesses of suffocation.

20. To-day for the first time we remarked that the sensibility of the skin covering the superior extremities was very obtuse; the patient now complains of pain along the traject of the cervical vertebræ; the frequence of the pulse and difficulty of respiration continue as before. Two cauteries are applied *colo dolenti*.

22. Inspirations 66; pulsations 132; the act of drinking excites violent coughing; the sensibility of the superior members continues obtuse; the lower extremities conserve their normal sensibility; the patient can get up and walk about without any assistance; he assures us he does not experience any pain. Continue the purgatives.

23. The voice is to-day broken; the respiration has now mounted to 90 in the minute; on auscultating and percussing the thorax with attention, we are unable to discover any organic lesion in this cavity; the sight is distinct; the limbs are free from any convulsive movement; during the day the patient got up several times to the close-stool; at 10 o'clock in the evening he was seized with violent agitation, which continued until 1 o'clock in the morning, when he died in a fit of suffocation, without any convulsive movements.

Autopsy.

On examining the body we find the brain perfectly healthy, as also its membranes; the cerebellum is a little more injected and less firm than in the normal state; the pons varolii is free from any alteration; however, on laying open the spinal canal, opposite the fourth and fifth cervical vertebræ, we find a softening of the spinal marrow, extending about the length of an inch downwards; the softening does not affect the whole of the thickness of the chord, but is limited to the posterior moiety; the softened pulp presents a slightly yellow tint; we do not observe any tubercular deposits in or near the softened pulp; the membranes of the spinal marrow and the osseous canal are both quite normal. The lungs present some ancient adherences to the costal parietes; they are generally permeable to air, but contain a good number of small tubercles in a crude state. On opening the pericardium we observe an adherence between

that membrane and the heart, to about the extent of a shilling piece, near the apex; the uniting membrane seems to be of old formation; the tissue of the heart free from alteration. Nothing worthy of notice in the intestinal canal.

CASE 2.—*Tubercle occupying the Left Hemisphere of the Cerebellum; Ramollissement of the Cerebral Pulp; Paralysis, with Contraction of the Limbs on the Right Side of the Body.*

Nicolas Baude, twenty-two months old, was brought to the hospital on the 9th of January, 1836, in the following state:—The child's head, which is voluminous, and projecting over the left parietal bone, is constantly inclined towards the left side; the anterior fontanelle is not ossified; the face is coloured; the sight intact; the eyeballs are affected from time to time with convulsive movements. The superior and inferior limbs on the right side of the body are both paralytic and contracted; the affected parts are also œdematous; the child coughs; we hear nothing but a mucous râle on both sides of the chest; the respiration is a little difficult; the tongue is natural; deglutition is performed with ease; the appetite good; stool daily. The father of this child informs us that he was born at the full time; that the projection of the skull at the left side always existed, that he never walked, but could pronounce distinctly the words papa and mamma. At the age of thirteen months he was seized with an acute inflammation of the chest, which detained him in bed for a fortnight, and required the application of a blister to the thorax; since that time the infant has constantly coughed, but he recovered his flesh, and had always a good appetite. At the beginning of December 1835, his parents for the first time observed some convulsive movements of the eyeballs, which recur at short intervals; fifteen days after the appearance of this symptom, a permanent contraction of the limbs on the right side set in. Leeches to the anus, blisters to the limbs and neck, sinapisms to the feet, did not effect any change in the patient's state. On the 6th and 8th of January, general convulsions, with foam at the mouth, which persisted for about five minutes at a time. From the 10th to the 11th of January, the child's state persists without any change. On the 12th, coma, strabismus, dilatation, and immobility of the pupils; abolition of the sight, ending in death.

Autopsy Thirty-six Hours after Death.

External appearance. — Considerable plumpness of the body; the limbs on the right side continue stiff, as during life; the fingers are strongly flexed against the palms of the hands; the limbs on the opposite side of the body are relaxed.

Cavity of the Cranium.—The dura mater is adherent to the osseous parietes round the anterior fontanelle, which is not ossified; there is no accumulation of serum in the great cavity of the arachnoid; the glands of Pacchioni are but slightly developed; the arachnoid membrane lining the superior surface of the brain, conserves its transparency, and is elevated by a good deal of serum shed into the sub-serous cellular tissue. This fluid is clear and of a gelatinous consistency; it penetrates between the convolutions, several of which it separates from one another; there is no adherence between the membranes and cerebral substance; the latter is pale, save in the medullary and cortical portions. The lateral ventricles contain about four or five ounces of transparent serum; in the optic thalamus of the left side, we find a tumour of an inch diameter, which appears to displace the neighbouring parts, and especially the right optic thalamus, that seems a little atrophied. The body just named is formed by a tubercle of the size of a small apple, and having the consistency of firm cheese; it is of a greenish white colour; at the upper part it is quite free and uncovered; at the sides and below it is lined by cerebral pulp, which is softened to the depth of one to three lines; the central white parts, as the septum lucidum, fornix, and corpus callosum, are intact. The membranes lining the base of the brain are in a normal state; no injection or ramollissement of the cerebral substance here, or in the cerebellum and spinal marrow; no tubercular deposit except the one we have noticed.

Thorax.—All the thoracic ganglia are tubercular; false organized membranes unite the lung to the costal pleuræ on the left side. Both lungs are the seat of tubercles, disseminated and confluent. The pericardium contains a spoonful of clear serum; heart healthy.

Abdomen.—Liver of a rosy-gray colour; pale in certain spots, and very friable; spleen normal; mesenteric ganglia not much developed, though almost all are tubercular; the mucous membrane lining the intestinal canal and stomach is healthy.

Spinal Marrow.—The spinal canal seems throughout, and especially inferiorly, more capacious than is natural. Underneath the arachnoid, we observe a considerable quantity of clear, gelatinous serosity; the spinal marrow itself is firm, and seems somewhat atrophied.

CASE 3.—*Ramollissement of the Cerebrum.*

[Child 6 years old; symptoms of pulmonary consumption; acute peritonitis intervening; death. Yellow softening at the upper part of the middle lobe of the right hemisphere; tubercular infiltration of the surrounding pia mater; caverns at the summit of both

lungs; sero-purulent effusion into the cavity of the peritoneum.]

Henry Loillot, six years old, the son of a woman now in the last stage of pulmonary consumption, was transported to the *Hopital des Enfans Malades* on the 3rd of February 1836; on the following morning we observed that the child was pale and thin; the neck was the seat of several glandular engorgements; the abdomen considerably tumefied; externally, near the umbilicus, we felt a number of knotty tumours; the patient coughs, and is affected with diarrhœa. On examining the chest, we find a dull sound, pectoriloquy, and gurgling, underneath the right clavicle; we also remark a paralysis of the lower extremity on the left side; the motility of the limb is completely lost, and the patient is unable to communicate to it the slightest motion; the sensibility of the limb is intact; there is no modification of motility or sensibility in the left upper extremity, or in those on the right side of the body. The intelligence is sound: we do not observe any modification of the sight or hearing. When questioned as to the cause and invasion of the paralysis, the little patient informed us, that about a month back, while dressing himself, he had a fall, and since that time he began to walk with some difficulty. His uncle is unable to give any more precise account; however, he affirms that, although the child dragged after him his left leg, yet he was able to go a good distance on foot, three days before his reception into the hospital; that he coughed for a length of time; was almost constantly in a stupid state for the last three weeks, and complained frequently of his head.

The patient was ordered to take a cough mixture, while the progress of the disease was observed. The state of the patient did not present the least change until the 9th of February; the paralysis continued solely in the left lower extremity; the headache was complained of only once, seated in the frontal region.

On the 9th of February the child was seized with acute pain in the right side of the abdomen; the pulse became accelerated, the figure altered; on the following day the pain extended to the other parts of the abdomen; it is combated by opiate draughts.

12. The child lies exclusively on the right side; the face is shrivelled; the respiration anxious, 54 in the minute; the pulse 140; the abdomen is tumid, tympanitic, and painful on the slightest touch; there is some nausea and no vomiting; the patient answers correctly all the questions we address to him; there is no derangement in the functions of sight or hearing; the muscular power of his hands appears intact; but the left leg is always motionless towards midnight. The little patient sank quietly, conserving till the last moment its intellect.

Autopsy.

Cranium and Rachis.—The dura mater and arachnoid attached to it do not present anything remarkable; in the superior and internal part of the right cerebral hemisphere, and on a line with the middle lobe, the pia mater presents several yellow spots, of a line to a line and a half in thickness; these spots present the consistence of Gruyere cheese, and are adherent to the substance of the brain; the latter is completely softened, and in some places presents a reddish, in others a canary-yellow tint, while in others, again, it contains some sanguineous clots, varying from a pin's head in size to that of a small pea. The alteration just described occupies the whole superior and internal part of the middle lobe; it is circumscribed in an irregular manner, and descends nearly as far as the roof of the lateral ventricle, where it is gradually lost; the ventricles contain hardly any fluid, not more than a teaspoonful; the corpora striata and thalami are in a normal state; the base of the hemisphere also is quite free from any alteration; at the extremity of the left hemisphere we also observe some small yellow patches and a few granulations; the cerebral substance underneath these patches is slightly diminished in consistency, but we cannot say ramollissed as in the right hemisphere. There is nothing worthy of being detailed in the rest of the cerebrum, in the cerebellum, or pons varolii, all of which parts were examined with care.

The Spinal Marrow presents every where a normal degree of colour and consistency; we do not find any trace of tubercle; the arachnoid is separated from the pia mater by a small quantity of serous clear fluid.

Neck and Chest.

The Cervical and Bronchial Ganglia are transformed into tubercular matter, and at the summit of the right lung we find a large tubercular excavation; there are two much smaller in the left lung; the portion of pulmonary tissue surrounding is indurated; the other lobes are studded with crude tubercles.

Abdomen.—The ganglia in the neighbourhood of the liver and pancreas are changed into tubercular matter; the mesenteric ganglia form masses as large as the patient's fist; the liver is covered with a purulent layer, and the peritoneal cavity contains a small quantity of muco-purulent fluid. Nothing remarkable in the other abdominal viscera.

In juxta-position with this case, which has been recently observed, we may place another, much more remarkable, that occurred at the hospital several months back.

Case 4.—*Ramollissement of the Cerebrum.*

[Child ten years old; cephalalgia affecting the right side of the head; numbness of

the left leg for eight days; then general convulsions, followed by coma, and hemiplegia of the left side of the body; disappearance of the coma at the end of twenty-four hours; persistance of the headache; contracture of the left arm; symptoms of mental alienation; intervening small-pox. Death thirty days after its invasion. Ramollissement of the inferior portion of the middle lobe of the cerebrum on the right side.]

Eliza Adele Chabeaux, ten years of age, whose mother died about a year back in a state of insanity, had been for a long time addicted to the vice of masturbation. She experienced for eight days intense headache, occupying specially the right side of the head, when on the 10th of April, without any known cause, she was seized with general convulsions, accompanied by complete loss of consciousness. A physician was immediately called in, who applied eight leeches behind the ears, and sinapisms to the lower extremities. The convulsions disappeared rapidly, but the patient remained plunged in a state of coma. On the 11th of April she was brought to the hospital, where we observed the following symptoms a few minutes after her arrival: — *External appearance.* Body fat; head large; forehead well developed; face pale; eyelids at one time closed, at another half open; irregular movements of the eyeballs, which are almost constantly directed towards the right side; no deviation of the mouth; no trismus.—*Intelligence.* Complete loss of consciousness; coma, without any low cries; no answer to any question.—*Motility.* Demi-resolution of the limbs on the right side of the body; complete loss of motion in the limbs on the left side. When the skin of the left arm is pinched, we do not observe any motion, but the patient agitates her right arm as if to remove the hand which touches her. No contraction of the limbs or retroflexion of the head.—*Sensibility* is conserved equally on both sides of the body.—*Digestion.* We can only see the tip of the tongue, which appears to be moist; the abdomen is retracted and indolent on pressure; no vomiting or nausea; constipation for several days.—*Circulation.* Pulse small and irregular, 108; temperature of the skin moderate.—*Respiration.* Twenty-four respiratory movements in the minute; the respiration is unequal, and at times sighing. We obtain nothing but negative results from the auscultation and percussion of the chest.

M. Jadelot ordered the dresser to write on the ticket, "Hemiplegia, subsequent to convulsions," and ordered, 1st, eight leeches to the temple, and behind the ear on the right side; 2nd, cold applications to the head; 3rd, sinapisms to the lower extremities; 4th, an infusion of mallows for drink. Two hours after the application of the leeches, the child recovered from the state of coma in which she lay plunged, and asked for drink.

12. The girl answers to-day all the questions put to her; she complains of pain in the head, and points out the right temple as the seat of the pain. The sight is intact; pupils rather contracted than dilated; the irregular movements of the eyeballs have ceased; no loss or diminution of hearing; the right arm and leg conserve their power of motion. On the left side we find the arm in a state of contracture, while the leg is extended and rigid; both are perfectly motionless; pulse 120; inspirations 24. A blister to the neck.

10. The headache and contracture of the left arm persist; pulse and respiration as yesterday; no change in the other symptoms. Eight leeches behind the right ear.

14. The contracture of the left arm has now disappeared; the limb is supple, and falls like a dead mass; the child's countenance is stupid; somnolence. The answers still correct; the sight is weakened; urine involuntary; no stool since the patient's admission; pulse 114; respiration 36. Two grains of calomel every hour; head to be shaved, and then rubbed with a pommade composed of equal parts of calomel and suet; friction of the paralyzed limbs with acetic ether; infusion of linden for drink; two teaspoonfuls of sirup of sulphuric ether internally.

15. The headache is still obstinate; the contracture of the left arm has returned, with imperfect paralysis of the left leg; urine involuntary; two stools. Continue the remedies.

From the 16th to the 30th of April, the headache continued, and never left the patient for an instant, being fixed in the right temple; the left arm remains contracted and completely immoveable; the left leg can exercise a few slight motions. On the right side of the body motility is still intact; the sensibility is not modified; the patient answers correctly to a few questions, but she is seized with an inconceivable loquacity that disturbs the repose of the whole ward. She speaks to every body she sees as to old acquaintances; laughs and cries without any motive. From time to time she gives herself up with energy to the vice which she has been so long addicted to, or tears off the plaster from the blisters and carries it to her mouth: in a word, she has fallen into a complete state of mental alienation. She is now carried into another ward, and the right arm is confined in the strait-waistcoat.

May 1. The pulse has become accelerated: the pain has now extended to the whole head, and the child is affected with nausea and vomiting.—On May 2nd, the patient, who had not been vaccinated, is covered with

an eruption of small pox. On the 3rd the strait-waistcoat being removed, the patient destroyed with her nails the cicatrix covering a leech-bite over the right temple; she thus opened a small branch of the temporal artery, the hemorrhage from which could not be commanded before the expiration of a quarter of an hour.—4th. The face is pale; the variolous pustules are sunk and flat, the tongue dry and dirty, pulse small and very quick: the contracture of the left arm is more evident than ever; it is impossible to separate it from the chest, the lower extremity on the same side is completely paralytic, both extremities on the right side of the body are from time to time affected with a trembling motion. The skin continues to preserve a normal degree of sensibility. The patient is now delirious, and the pupils are dilated; she imagines that she hears a concert, and sees the musicians at the extremity of the ward. The excretion of urine and fecal matter is involuntary: the wound produced by the blister on the neck has become gangrenous, as also have some ulcerations from the sinapisms on the legs. From this moment the patient sank gradually, and died without convulsion on the 5th of May.

Autopsy.

The pustules are flat and scarcely apparent, skin universally pale; the left upper extremity remains rigid, the others are in a state of relaxation; cranium voluminous; dura mater healthy; arachnoid transparent; pia mater slightly infiltrated with serum; the right hemisphere of the cerebrum seems smaller than the left; when divided by fine layers, this hemisphere does not present any alteration as far as the lateral ventricle; the optic thalamus and corpus striatum are healthy: however, beneath these parts, on the right side, we find the cerebral matter reduced to a soft yellowish pulp, a part of which is completely fluid; the ramollissement is strictly confined to the inferior portion of the middle lobe. The left hemisphere, the pons varolii, cerebellum, and spinal marrow, are free from morbid alteration. The other cavities do not present any change worthy of notice: we do not find any trace of tubercular deposit.

The two cases last reported present examples of ramollissement of the brain in which the symptoms of this affection were sufficiently well marked.

In the first of the two, the disease to which we ventured giving the name of *tubercular meningitis*, instead of terminating, as it almost always does, in acute hydrocephalus, gave rise to inflammation and ramollissement of the cerebral pulp. The previous history of the case is not so perfect as we could have desired it to be; thus we could not ascertain the precise time at which the headache commenced; we are therefore compelled to regard the paralysis as one of the first symptoms; this was soon joined by headache, but the intervention of acute peritonitis prevented the further march of the disease, by terminating the patient's life.

In the second case, besides headache, corresponding to the injured side of the head, we have paralysis, and the peculiar muscular contraction, which, though not a pathognomic symptom of ramollissement, is still an element of great value in the diagnosis of that disease. We would draw the attention of those who persist in attributing the coma of hydrocephalus to the effects of serous effusion and compression, to the manner in which the acute stage of ramollissement set in here. After some hours of general convulsion the patient falls into profound coma. Are we thence to conclude the existence of considerable effusion? Certainly not. The truth is, that coma is a symptom which attends various diseases of the brain widely different from one another. We have seen the deepest coma terminating fatally, produced by simple cerebral congestion, without the slightest trace of effusion; here certainly compression may be admitted; but what shall we say of those cases where the cerebral pulp is pale and bloodless, where a small portion of the brain is reduced to a fluid consistency, where the general bulk of the brain is rather diminished than increased, yet the patient falls into the same degree of unconsciousness as if the ventricles were distended by half a pound of fluid? We have already satisfied ourselves by close observation of facts, and by a few opportunities afforded of examining the bodies of patients affected with cerebral disease, who were cut off by some other malady, that the slow pulse, irregular respiration, and the dilated pupils, are not necessarily connected with effusion, but may coincide with a much earlier period of cerebral affections. We do not attempt to explain under what condition of the brain this may occur, whether it depends on congestion or exhaustion; it is enough for us to have removed an error; to others must be the credit of advancing a step further.

P. H. Green.

SCALD OF THE GLOTTIS.

LARGE DOSES OF CALOMEL. BRONCHOTOMY.

To the Editor of THE LANCET.

SIR: Enclosed is a case of Scalded Glottis successfully treated on Dr. Wallace's plan. Had I not read that gentleman's lecture in THE LANCET of the 19th ult., I should not have given the calomel to the extent required, or, very probably, not at all. This shows what benefit is derived from the publication of lectures. The knowledge of eminent men, or of a successful remedy, is, through the medium of THE LANCET, put instantly into the hands of every medical man in the kingdom, and spread over the world, in an infinitely shorter period than it could be through any other source. I have to thank Dr. Wallace and THE LANCET for putting it in my power to rescue the poor little fellow from inevitable death. I am, Sir, your obedient servant, M. G. SMYTH, M. D.

Vauxhall Walk, April 4, 1836.

CASE.—Thomas, aged three years, son of Mr. Guisford, of No. 6, Anderson's Walk, Lambeth, at four o'clock in the afternoon of the 31st March last, applied his mouth to the spout of a tea-kettle in which the water was boiling, and drank a portion. I was informed of the accident at eight o'clock in the evening, but did not see him until eleven. His face was then very pale, and expressive of great anxiety; his respiration was hurried and loud, the lips and chin were scalded, the tongue, palate, and gums, white and wrinkled. He would not let me see farther into his mouth. He had not taken the calomel ordered. I now directed four grains of calomel every half hour, and crowded leeches under the chin. I saw him two hours afterwards, he was then fearfully worse, breathing so loud as to be heard distinctly more than twenty yards from the door of the house, sonorous and harsh, with little apparent cessation; his lips were open, the chest and throat heaving violently, eyes fixed and starting; he was gasping in the agony of strangulation. Being resolved to try Dr. Wallace's treatment, and being now able to remain with the child, I did not resort to bronchotomy, although so strongly indicated. I had him held upright in the easiest position to breathe, and continued the calomel as above, promoting the bleeding from the leechbites by a poultice. Nausea and sickness followed the calomel doses, which relieved him, and at four o'clock he was so much better that I quitted, ordering a blister, and three grains of calomel at intervals of an hour.

On the early part of the 1st April, the respiration was much improved; he had had two motions, coloured like boiled spinage, but the cerebral functions seemed alarmed. The eye was heavy, the pupil dilated, and there was much stupor and drowsiness. I ordered leeches and cold applications to the head, and continued the calomel, and, to assist it, I ordered mercurial friction to the thighs. At four o'clock p. m., exactly twenty-four hours after the accident, I was sent for, and found him stretched out and stiff, arms reaching backwards, and the hands twisted backwards and clenched convulsively; the respiration rattling, the chest and throat heaving, the pulse fluttering, the pupils dilated, contracting neither to light nor touch. He was insensible to sound or feeling. I immediately performed bronchotomy; he breathed freely by the wound, and in a few minutes revived so far as to make a sign for drink, which he took greedily, it got into the larynx, and was coughed through the wound and nostrils. He now for the first time since I saw him endeavoured to speak. On the 2nd he was much better. There was mercurial fetor. In the evening the bad symptoms were all gone, I closed the wound, and discontinued the medicine.

On the 3rd (yesterday) the respiration again became hurried and harsh, with some return of stupor; the calomel and mercurial friction were renewed, and in the evening he was well. To-day he is out, his voice is husky. When he drinks, a portion gets into the larynx, and excites a cough, which is painful; otherwise there is no complaint.

Observations. This was a very severe case, and without calomel the other means of cure would have been ineffectual. The rapid approach of danger will render the operation necessary long before mercurial action can be established; or if calomel is to be tried, I would advise the surgeon to sit by his patient, knife in hand. Bronchotomy, besides giving time, assists the cure by relieving the injured parts from their violent action. I do not think it necessary to snip a piece out of the trachea. That tube is in violent action at the time, and it is not easy to draw it forward, and use scissors, in a plump child. I made a perpendicular slit, which answered well. The relief from the first doses of calomel was caused by the nausea, and I think antimonials would be of service; leeches and blistering will be of service, and mercurial friction will facilitate the action of the calomel.

SKETCHES OF THE MEDICAL PROFESSION IN IRELAND.

MR. CUSACK.

PARK-STREET SCHOOL.

Some time about the year 1825, a proposal for the establishment of a private medical school was made by the late Mr. Thomas Rooney of *the Meath*, to Mr. Cusack, of *Stevens' Hospital*. Mr. Rooney, who viewed scientific pursuits through the sober medium of political economy, persuaded himself, after a diligent series of experiments on the credulity of patients and apprentices, that he had at that period acquired a surplus of knowledge and reputation which might be profitably employed in the instruction of the rising generation of surgical students in Ireland. In applying to Mr. Cusack, he fancied he had found a partner worthy of the enterprise; and in all other respects, save that of estimating Mr. Cusack's sagacity at too low a rate, the selection was founded upon correct principles of calculation, and a clear perception of character. Fortune, aided by his own exertions, had placed Mr. Cusack in pretty much the same predicament of means and motives for pushing his conquests farther, as Mr. Rooney himself; and it may be readily supposed that he received the proposition with alacrity and favour, however different his opinion might be of the mode of carrying it into execution. A crisis in his circumstances had arrived, and adopting Shakspeare's motto, that

"There is a tide in the affairs of men,
Which, taken at the flood, leads on to fortune,"

he boldly resolved to turn the advantages of the surgeoncy of *Stevens' Hospital* to the best account, and to prove to his indulgent patrons, the Governors of that Institution, who so generously had compounded with their consciences in his appointment, that these advantages were not conferred in vain. Directing his attention to his own position —the point to which most of Mr. Cusack's thoughts tend—he saw himself surrounded by not less than forty apprentices, the expenses of whose education, though once discharged, were only about to commence; and, if not directed into some more appropriate channel, must of course flow into the College Treasury. Friendly as Mr. Cusack has ever been to the College of Surgeons, it was not to be expected that he would separate for its benefit the double tide of taxation to which pupils were then subjected, when it might be so conveniently diverted into one little "Pactolus" of whose "golden sands" he would be the sole trustee. Independently of these considerations, so natural to one in his condition, it is highly probable that he may have felt himself adumbrated by the shadow of Mr. Colles, which concealed him more than he thought was meet from the public view; and what made this reflection the more poignant was, that there existed little hope of the too-enduring substance which enveloped him in its shade being removed within any reasonable period of successional expectancy. As the "nearest and dearest friends" will decide in such cases for their own welfare in parting, that moment is generally considered the best for separation, when the resulting benefits of the movement wear the most autumnal aspect. With so many motives for attempting the experiment, it was not wonderful that Mr. Cusack should adopt with avidity the advice of his friend Mr. Rooney: it was however but the project, not the partner, of which he approved. Requesting time—that dangerous "integer" in all diplomatic transactions — Mr. Cusack employed the hours of deliberation with effect; and it was only by the sound of the mason's hammer in Park-street, and the publication of a prospectus of its school, from which his name was excluded, that Mr. Rooney's simple dreams of fame, fortune, and alliance with his honourable friend, were at length dissipated into thin air!

The appropriation of Mr. Rooney's project unincumbered by any connection with its legitimate parent, was not however the only difficulty which Mr. Cusack had to overcome. That indeed was an effort which any vulgar mind might have accomplished; but the choice of associates to secure success, and the provision against loss in the event of failure, were subjects which required somewhat higher qualities of address for their attainment. The yoking in of a single restive spirit in the new academic team, might derange if not impede altogether its future progress; while cheap as human labour has always been in Ireland, bricks and mortar, timber and slates, do not move into architectural coaptation without the encouraging smiles and dulcet notes of the financial Orpheus of College-green. It consequently became a point of the first importance with Mr. Cusack, to devise a plan by which the building might be made disposable without loss to the proprietors, in the event of failure bringing it under the "House-Agent's" dominion. Several suggestions were offered on the point; one would have it built in the shape of a respectable dwelling; another in that of an hotel; a third, and so on, would have it assume the form of a manufactory of some kind or other; at all and each of which Mr. Cusack nodded one of his characteristic negatives. The originality of his mind carried him far out of the beaten path of common-place expedients; and turning the helm of invention into those loftier regions of discovery and humbug, in which on other occasions he had been so fortunate, he at

length hit upon a plan worthy of his genius and of adoption. The plan upon which Mr. CUSACK settled in this instance, is so characteristic of his mental resources, that a word or two on its origin may not be out of place. About the time of which we are speaking, the Protestant principle seems to have been undergoing one of its periodical movements in Ireland; the spirit of multiplication was vigorously stirring within it; and promised daily to shatter the unity of the Irish Church into all the religious forms and fragments of Christianity expected from the "Second Reformation." Here was an opening vista in which Mr. CUSACK beheld with pleasure the new edifice of Park-street safe from the fluctuations of the "market" and the contingencies of the "hammer." To provide for the new-born communities of Christians called into being by the labours of the "Propaganda" of Cavan, convenient places of worship, was both a laudable and a safe speculation. Mr. CUSACK, following up this happy idea, proposed at once that the new building should be constructed so as to be convertible at any future period into a snug dissenting "Meeting-house," by the mere removal of the profane accompaniments of anatomy! The thought was so obviously a masterpiece of sagacity, that it was unanimously agreed to; a draft of the building thus "contrived a double debt to pay" was forthwith ordered; and, in its circular-headed windows and gabled front, it still preserves the provident stamp of Mr. CUSACK's genius.

Mr. CUSACK was equally happy in the selection of his fellow-labourers. Various circumstances combined to point out Dr. JACOB as an eligible and willing agent in the concern. Notwithstanding his often and ardently-expressed admiration of Dr. MACARTNEY of *Trinity College*, Dr. J. was weary of the subordinate character of Demonstrator; and probably conceived he had acquired sufficient knowledge and credit by his own connection with that eminent Professor, to undertake the part of a principal in a smaller establishment. Besides, he must have felt that in an institution as restricted by the statute-book to one undeviating course, as a planet to its orbit by the laws of gravitation, and, indeed, fully as little subject to human influence, there was no prospect of opportunities occurring for the exercitation of those peculiar qualities, of which Dr. JACOB has since given to the world so many convincing testimonies. His heart panted for a wider scope of exertion—his "borrowed plumes" trembled for migration; and like the youthful Norval who "had heard of battles and longed &c.," he only required to hear the roll of the recruiting drum, to enlist in the ranks, and it must be allowed that he met with a chief worthy of his high destination. The *corps dramatique* of the establishment was soon completed by the addition of congenial associates, selected by Mr. CUSACK on a principle, the operation of which in this institution shall form, should we have space, the subject of our concluding remarks.

While many of these, his earlier companions, have transferred themselves to the "rich preserves" of the surgical corporation of Dublin, Mr. CUSACK, ambitious of the most exalted station in that head-quarter of corruption, "bides his time;" and awaits in decent silence the fulfilment of that arrangement which rumour, at least, has established between him and Mr. COLLES, for succession to the chair of surgery. Upon his qualifications for this important office, there is some difference of opinion, but it is owing no doubt to a misunderstanding of the nature of the duties belonging to the situation, and of his character as a surgeon. It is true he holds a high place with many in the mechanical medicine of Dublin, and that if a prompt and judicious application of surgical science, in all cases requiring its interference, be intended by this estimate, his merits have not been overstated. With all the manipulations of surgery, and all those signs by which surgical diseases are recognised, long experience and observation must have made him familiar. Neither will it be disputed that he is conversant with the writings of most British surgeons, and that he has from time to time tested the value of their doctrines in the wards of *Stevens'*. The proofs and concessions however which establish his competency to serve his patients, do not necessarily apply to the case of his pupils, there being no greater fallacy than that which assumes that an efficient practitioner must be a good teacher. Every student who has attended Mr. CUSACK's lectures, must have observed in them a practical refutation of such an hypothesis. Educated in a school which restricted surgery within the narrowest possible limits, and almost entirely excluded the aid of rational speculation in treating the subjects of that science, Mr. CUSACK's duties as a surgeon, and interests as a partisan of that school, have only confirmed him in the errors of his times, and, it is to be feared, they incapacitate him from taking his place among the philosophic professors of the present day, who would illustrate, by a knowlege of principles, the dark mysteries of empiricism. He scarcely takes the trouble to conceal the opinion (which, in despite of all profession to the contrary, would still be obvious from his discourses), that surgery has for some time arrived at the acme of perfection; and that all attempts to extend its boundaries, or to innovate on the method of studying it in Stevens' Hopital, are but the mere dreams of modern enthusiasts. Even in the ever-changing empire of science, Mr. CUSACK

would be a tory; and fling upon the irresistible current of improvement, the feeble fetters of authority, and the usages of past ages. The consequences of this tone of mind assume an amusing aspect in the lecture-room. Believing, as Mr. CUSACK does, that a surgical education consists in a knowledge of certain operations, and an acquaintance with certain morbid phenomena, it may well be supposed that he has devoted little attention to the arrangement of his lectures, or to the subjects of which they are composed. Most lecturers, too, condescend to respect the quality, and even the quantity, of their language, as a necessary means of communicating their ideas. Mr. CUSACK pursues an opposite course, and enters the theatre as if determined to substitute pantomime for all the "parts of speech." Others attempt to conceal their poverty of ideas by a profusion of words; Mr. CUSACK rejoices in the converse of the device, and leaves his auditors to infer the depth and extent of his knowledge by the parsimony of his phrases, and the exuberance of his physiognomical expression. His face serves as a sort of "chapel-of-ease" to his tongue, the muscles of the one most faithfully undertaking the performance of half the duties of the other. The narration of a train of symptoms, or the description of a morbid appearance, commenced in an impressive tone, is not unfrequently concluded through the myological medium of Mr. CUSACK's speaking countenance. He may now and then proceed as far as the first or second member of a sentence in describing a disease, or delivering an opinion; but it rarely happens that he does not finish the effort by a certain knowing contraction of the external canthus, or a profound protrusion of the under-lip, in which much of Mr. CUSACK's mute eloquence appears to reside. With these silent auxiliaries of his descriptive powers, we have seen him *ogle* half the history of a "fungus hæmatodes;" and go through no inconsiderable portion of an operation, with the sole assistance of the "orbicularis oris." It is not, however, to be supposed, that Mr. CUSACK's face is remarkable for the mobility of its structure, or a playful variety of expression so often connected with high intellectual endowments. No greater mistake could arise out of our imperfect representation, as the few peculiarities we have stated are only rendered conspicuous by standing out in isolated relief upon the broad and unsymmetrical disk of a torpid and common-place physiognomy. We recollect nothing, indeed, in fiction or in reality, which can so well convey to the mind of one who has not seen the original in his intercourse with his class, a correct notion of Mr. C.'s manner and appearance, as the account of SWIFT's philosopher in the academy of Laputa, who undertook to supersede the use of language in the communication of knowledge, by a bundle of symbols to represent words and ideas.

The *disjecta membra poetæ*, may, indeed, be recognised now and then in his dislocated sentences and dark inuendoes, but it would require a commentator with the talent of a CUVIER for reconstruction, to patch them up into an intelligible form. There are occasions, however, when Mr. CUSACK can put off the dull lineaments of affected wisdom, and be roused into turbulent excitement, when the passions of self-interest and ambition assert their natural sovereignty in his breast, over the artificial assumptions of equanimity and moderation. We recollect having witnessed one of these glowing, but incautious triumphs of temperament over the frail and fictitious virtues of design and cultivation. The metamorphose of the wily simpleton into the coarsest partisan was complete, and indicated abilities worthy of higher objects and a better direction. The cause of medical reform had been then making rapid progress in Dublin, and was openly and ably advocated in some of the private schools. It was thought prudent to attempt to stop its further advances, by opposing to its march the once effectual barriers of corporate authority and professional *prestige*. Mr. CUSACK was chosen to carry the onslaught on the reformers into fatal effect. He entered the theatre, followed by a mob of exulting retainers, who degraded even the humble duties of vassalage by the mean and ferocious malignity of their conduct. The long and vacant gaze of universal acquiescence with the opinions of all men, habitual to Mr. CUSACK in his intercourse with the world, was seen to lower, as he commenced the charge, into a lurid expression of cowardly irritation; and the regulated phases of his features, with which he was wont to veil from view his private convictions, to be fixed in a spasmodic impersonation of powerless rage. A torrent of pointless vituperation on all those who were opposed to that system of which he stood forth the characteristic advocate, came to his relief, and, in the course of some time, with the apathy of his auditors to the frantic appeal, restored him to the tranquil indulgence of his taste in buffoonery beyond which it is not quite safe for him to venture to rise. Not many years have elapsed since this furibund but futile effort was made to strangle medical reform in its birth in Ireland; but few as these years have been, they are sufficient to teach Mr. CUSACK and his satellites the folly of endeavouring to preserve by such means the rotten outposts of corruption against the innovating influences of time and thought. The party who then smiled encouragement on their leader,—who hallooed him on like a mastiff on his prey, are now, together with him, as tamely as so many spaniels, crouching beneath the lash of reform; and

humbly, but treacherously, beseeching its triumphant advocates at the seat of government, to preserve a little longer in some mitigated state of corruption, that institution which mercy itself cannot rescue from the punishment due to, and incurred by, its crimes.

In general Mr. CUSACK, however, commands his temper, and dissimulates with success. His college intrigues are cleverly conceived, and conducted with prudence, seldom giving his opponents an opportunity to obviate his plans, and carrying them into execution without any squeamish regard for the means. No one knows better than he, how to insinuate the advantages of conservative principles in College politics, or to lull into repose the rising scruples of juvenile independence about a vote on a field-day in Stephen's Green. If fair words do not win over the reluctant youth to his objects, a well-timed intimation of promotion being shortly in the way, relaxes resistance, and seldom fails of bringing him within the fortunate ranks of one of Mr. CUSACK's "majorities." By these and similar means he has got at the head of a party in the College, through whose agency that institution has been effectually usurped. Its treasury, property, and professorships, are now wholly at their disposal, and converted to their own purposes without the slightest regard to justice or public opinion. Since Mr. CUSACK established this league between his own and the College school, the professorships in the latter, which an honest and independent profession would hold sacred as the sources of scientific instruction, and as the appropriate and honourable rewards of talent and industry, have been almost without exception given away as compensations for services rendered in the support of this ruinous confederation. Through a reform alone of medical law, relief is now to be sought from the evils of a combination which includes within its vortex a disposable force of corruption far beyond the controlling power of any liberal party which could be formed in the College in its present state. To this remedial change every eye is now turned; and, as in all probability the conditions of it will be shortly announced by the Government, we shall take an early opportunity of developing at greater length the scheme adopted by Mr. CUSACK to frustrate that measure, and of adding a few suggestions on some essentials which, to be efficient in Ireland, *it must contain*.

ERINENSIS.

Dublin, March 25, 1836.

INTERCEPTED LETTERS.

"DEAR SIR HENRY: The liberal and good-natured manner in which you condescended to receive my letter, and the value you appear to have placed on my observations, prompt me again to take the liberty of addressing you on some other matters relative to the present system of things in the profession. Your last letter, indeed, the most striking clauses of which I submitted to the consideration of some active and bustling fellows, created a good deal of discussion, some applauding in the most unqualified manner all your remarks, whilst a few, who presumed to be more fastidious, professed to doubt the propriety of some parts of your conduct. The grumblers seem to object in particular to the principle of your associating yourself directly or indirectly with disreputable individuals. We all agreed that the conduct of the surgical Knight was contemptible, and some contended that it would have been a much higher, and certainly a less exceptionable line of conduct, for our distinguished President to have adhered to a straight-forward course, and kept at defiance, rather than become an accomplice with, the intriguer alluded to. In comparing yourself with BONAPARTE, it was remarked, during our conversation, that the comparison did not in all respects hold good; for, whilst NAPOLEON had to govern nations, you had merely to legislate for a handful of Oxford and Cambridge disciples. It is true that it became important, in the Emperor's vast field of government, to employ able statesmen and skilful generals, of dubious character, but it was because they should not be engaged by his enemies, and his watchfulness over them prevented them from doing mischief. But those who have attempted to alienate themselves from your cause, really are not worthy of your notice, for they can never assist the glorious purpose in which we are struggling under your banners. They are a powerless squad, and so bereft of principle as to merit every contempt. The real liberals, indeed, affirm (and I believe them to be sincere) that *they* would not degrade *themselves* by such an association, or have the public suppose for a moment that they either had or wished to have anything to do with them. The decided tone which you assumed when alluding to the organs of *gastronomy* and *acquisitiveness* in guiding mankind, whilst it may be highly creditable to your penetration, surprised some of us not a little. Nothing, indeed, but *positive proof* will convince some of the incredulous that by a good dinner or a rich patient, you could seduce such a man as Dr. W. from the straight-forward path. He is yet young, and his success in life must

entirely depend on the integrity of his conduct. If, however, he *be* disposed to relinquish his former course of conduct for some worldly consideration, why *we* cannot help it. It is important, I understand, to Sir BENJAMIN and his *elite* at St. George's, to stop all opposition to his proceedings there, and it is essential that Dr. W. should be got to turn round and use his influence with LANE to suppress the publication of the long-threatened pamphlet. But you may depend upon it that LANE, who is as sharp as a needle, will cut his cloth as suits him best.

"During the interesting conversation with the Fellows in which these views were expressed, another circumstance was noticed, which you must excuse me for now alluding to. I mean your introduction to Court of young ALDIS, which we could not account for, unless it arose from your desire at all times to forward the views, of whatever nature, of any of the Fellows. The circumstance of his being the son of the surreptitious Knight and avowed charlatan, it was thought, ought, assuredly to have been sufficient cause for you to fight shy of the young doctor. The idea of this lad's wife making her appearance at the Queen's Drawing-room, really savours too strong of the *levelling* system.

"There is also a point on which Dr. PROUT, and some of our more aristocratic Fellows, expressed much anxiety, and which perhaps you may be so kind as to afford me the means of explaining. Anxious as they are for your support at Court, they are vexed that on the late occasion of the Princess's *burn* you should not have grasped so favourable an opportunity of issuing daily bulletins, your documents on many former occasions having given such universal satisfaction, for the concise and comprehensive views of the ailments of the royal sufferer, contained in them.

"The publication of your last oration has contributed much to fill up what was justly considered as a great literary chasm. A classical account of those illustrious and learned men was greatly needed. The sale of your former publication ought not to chill you against the present effort. It is Lord ALBEMARLE's opinion that that oration was too cheap at one shilling, and that the next ought to be at least two. The loss might then be trifling. I dined lately with the great bibliopole, and it was as usual a most loquacious party. I never saw MACMICHAEL, HOLLAND, and FERGUSSON, more communicative. They all seem to be ready at LOCKHART's nod, and glad to have a finger in the Quarterly. Have you seen DAVY's life of his brother Sir HUMPHREY? What an *exposé* of poor PARIS! If anything will change *his* regimen, this new biography must. Could you contrive any mode of whitewashing the Doctor? It might have been wisest to keep silent, had not every literary journal of character in the kingdom, when reviewing the genuine DAVY, exposed PARIS unmercifully.

"Ever, dear Sir Henry,

Your faithful servant,"

"MY DEAR FRIEND: I acknowledge the receipt of another most kind letter from you. It gratifies me beyond measure to perceive that my interests are so anxiously watched over by so many Fellows, whose good opinion and co-operation I shall ever esteem.

"In the first place I must put you right about the St. George's matters, as you seem, like all men who have not seen so much of the world as myself, to be perfectly mistaken about the good people there. A summons to see a patient at some distance in the country, in the middle of the night, which an old man like me would have been mad to comply with, I recommended Dr. WILSON to attend in my stead. He was, of course, delighted with the job, and I can with confidence assure you that the desired effect has been produced. It has already been the means of bringing him and Sir BENJAMIN together. It has produced a holy alliance, and they have shaken hands. It is well, however, that their clasped fists could not speak what passed within their respective bosoms, and that no Great Auscultator was present with his stethoscope to overhear and betray the language of their hearts. The occasion might have afforded interesting materials for a paper for our Dr. MACLEOD on some 'new *rules* and *bruits*.' These examples ought to convince all my young friends how necessary it is to take the world as it is, when they have any great national object to accomplish. For another rational end I thought it expedient to keep quiet the ALDISES, and you may depend upon it that these things rather give lustre to my fame and high professional elevation.

"I have heard from so many channels that Sir CHARLES CLARKE is to be a member of the detestable Metropolitan University, that I begin to think there is some truth in it, though I am surprised, considering all I have done for him, that he has not consulted me. I hear he does not flatly deny the report, but gives a kind of official simper when the subject is mentioned, and says nothing; but he evidently will jump at office. This is the way with all of them. I hear that the piece of plate presented to Sir CHARLES by the Norfolk ladies is truly beautiful, as well as valuable. I must confess the tender sex never paid me half so well for all I have done for them. Sir CHARLES, I understand, exhibited this emblem of affection to a vast concourse of the 'subordinates' whom he invited to a *soirée* expressly for the purpose of showing

them his token of love, but he did not condescend to invite me, so that I have not yet seen the valuable gift. I am told that the design is by CHANTREY,—a plateau on which three angels are supported by columns composed of males and females in highly fanciful and grotesque attitudes, and there are cupids, executed in a manner equal to the best works of FIAMINGO, entwined round them in elegant festoons. The three angels encompass a lady in the last stage of pregnancy, and there is a chaste figure of Sir CHARLES on his left knee, prepared to give his able assistance. The moral courage and deep reflection thrown into the Baronet's countenance, far surpass in effect the engraving from his portrait in the shop windows.

"I am very much obliged to you, my esteemed friend, for the delicate manner in which you spoke to my College friends on my position at Kensington. Considering that my duties have required my attendance at the palace every morning for many years past, it might have created odd and suspicious surmises, had any particular notice been taken, in the public prints, of my visits on an occasion when the princess had received only a slight burn, and though, on all former occasions, I have been eager and anxious to publish bulletins of my royal patients, yet, on this occasion, I am convinced that it was good policy in me to make no stir about the matter. It was a vile report that the royal burn was occasioned by a more vulgar spirit than *eau de Cologne*.

"I have just received a letter from my affectionate nephew, regarding the unfortunate and distressing occurrences at *King's College*, Strand, which compels me hastily, but affectionately, to bid you adieu. Ever yours,

"——.

"May Fair, March."

THE LANCET.

London, Saturday, April 9, 1836.

WHEN and where will the present quack mania end? There has been another trial,—there has been another conviction. Yet, we suppose, "a most intelligent community" will still continue to pay a costly price for being most effectually poisoned. ROBERT SALMON, against whom a verdict of "manslaughter" was returned at the inquest held on the body of the late Captain MACKENZIE, was put on his *trial* for manslaughter at the Old Bailey on Wednesday last, when, after a patient and lengthened investigation, he was found guilty; but the jury, considerate souls, recommended the manslayer to *mercy!* Small mercy did ROBERT SALMON show to the unfortunate Captain MACKENZIE. But the prisoner obtained the humane recommendation of the jury, on the ground that he was the "vendor" and not the "compounder" of the poisonous pills. Why, we ask, was not MORISON put upon his trial? If the evidence which was produced on the occasion, on behalf of the prisoner, is good for anything, that testimony can now be brought forward against MORISON himself,—that is, if the witnesses proved that the pills were prepared under MORISON's directions, and that they were supplied by MORISON or his servants to SALMON, the vendor. If the evidence of the witnesses stopped short of establishing these facts, then it is quite clear that the so-called evidence had little or no connection whatever with the case in question. MORISON himself, we suspect, will be placed in the dock, ere long; and if he were seen elsewhere, with a piece of hempen cord around his neck, no intelligent or humane man could commiserate his situation, unless, indeed, the appetite of the public for the marvellous and the wonderful could not be satiated, and unless some milder stringent than a halter could check the quack in his savage course of rapacity and death. We have no desire to resort to severe remedies, when those of a milder nature will accomplish a cure; but we do not think that it is a milder or a juster course to punish an agent, and let the principal go scot-free. The witnesses, who endeavoured to make out a case against SALMON, would, on their oath, be compelled to establish a case against MORISON,—that is, as we before observed, if they proved that the pills were of MORISON's compounding, and that he had supplied them, with directions, to the wanton tool or fool who ad-

ministered them to the late Captain MACKENZIE.

But how, we should like to be told, could the witnesses swear that the pills which they themselves, in their doltish faith, had swallowed, were similar to the pills which had been given to MACKENZIE? Did they see the pills prepared? Had they demonstrative evidence of the materials which entered into their composition? And if they were possessed of no such knowledge, it was rather hard swearing to assert that they had taken exactly the same description of medicine. We believe that it is not contended by any person that the actual composition of the pills is known to other than MORISON himself. True, the pills have been analyzed, but the difficulty of discovering, by chemical experiment, what is the precise composition of vegetable substances is such, that no chemist, whatever may be the extent of his acquirements, will venture to allege, with authoritative exactness, the sources whence *all* the detected materials have been obtained. Chemical analyses, therefore, in such cases as these, however advantageous they may be as auxiliary aids, are very deficient and unsatisfactory, if any attempt be made to render them the basis of a decision in a court of judicature. In this respect the "*vegetable*" medicine furnishes the quack with a powerful means of mystification, and the mind of the learned Judge who presided on the trial, appears to have partaken somewhat of the quality of the pills. He observed, "that the real "question for consideration was, first, "whether the death of the deceased was "caused by the administration of the pills; "and, secondly, whether the prisoner had "been guilty of any gross want of caution, "and of any carelessness, in administering "them. The question of the prisoner being "a licensed practitioner—(evidently mis-"printed in the *Chronicle* for *unlicensed*)— "was immaterial, for any regular medical "man who had been guilty of the gross "want of caution imputed, would have "been equally liable to a prosecution of "the present description as the prisoner. "*All prejudice on that ground must, there-"fore, be at once dismissed from the minds of "the Jury.*" Our judges appear to carry licenses in their pockets, to confer upon them the privilege of talking nonsense. More gross errors were never comprised within the same space, than are to be found in these three sentences. If the *Jury* believed that an unlicensed person in medicine ought not to undertake the treatment of disease by perseveringly administering a series of drastic purges, that belief is to be called "prejudice"!! The gross and infamous fraud of undertaking to practise medicine and administer physic to the sick, in threatening, dangerous diseases, is not to be taken into the account in a charge of manslaughter, where the whole gist of the accusation lies in the allegation that the medicine has been improperly administered! The Judge in this case, like other sage persons of his class before him, stated that if any regular medical man had been guilty of the gross want of caution imputed to the prisoner, he would have been as liable to a prosecution as the prisoner. Of course he would; and he ought to be subjected to a much severer punishment than the prisoner will, probably, receive; but what right has the Judge to presume that there is any regular medical practitioner in existence who has ever been, or ever could be, guilty of the gross indiscretion and scandalous ignorance which were exhibited by SALMON in his "treatment" of the poisoned Captain MACKENZIE? What said Mrs. MACKENZIE, the wife of the deceased:—

"When the prisoner called on me next morning, he desired to see what pills I had got left, but I had only one or two small ones; my husband had then taken the *eleven shillings packet* of 'No. 2' pills, and *a similar quantity* of 'No. 1.' I told the prisoner that my husband had been advised not to take any more, but he answered that he would give him one hundred if he thought he wanted them. I remarked that my husband was growing very weak and thin, and he replied that he must take off

the flesh before he could raise him up. He would raise me a new man. On his going away he ordered me to give the deceased thirty-five pills at three o'clock; but I told him that he could not take them, for he threw the others up with blood; he (the prisoner), however, went away saying he would send some more pills. Miss Lane accordingly brought *one eleven shillings packet* and *two boxes of powders*, and I paid thirteen shillings and twopence halfpenny for them. I gave the deceased twenty-five pills and a box of powders, together with some brandy and water, but he could not take it. The prisoner told me not to give the deceased any more pills until I saw him (the prisoner) again, and on the following morning at ten o'clock he came; he then produced two papers of powder, and called for a breakfast-cup, and he mixed up the powder contained in the papers, with some water. I inquired what it was, and he replied that it was *pills, powdered;* he then desired me to raise up my husband; I did so; he was *very weak and could hardly move*. The prisoner took the cup, and *poured its contents into my husband's mouth*, and some particles remaining round the edge of the cup, he put in some more water, and then *poured the whole of it down the deceased's throat*. I went down-stairs with the prisoner, but on my return my husband threw up the whole of what he had swallowed, together with a great quantity of blood; the prisoner was then sent for again, and he begged of my husband not to alarm himself, as there was always a little blood remaining about the stomach. The deceased exclaimed, *My Dear, he has poisoned me!*"

Is it necessary that we should again ask, —Where is the medical man who could act in this stupid and brutally cruel manner? Still, the learned Judge told the jury that the question whether the man was licensed or unlicensed was not a material point! All such "prejudices" were to be discarded from their minds! The gross folly and absurdity of such a recommendation may be made apparent by a thousand illustrations.

Suppose, for instance, a landsman, who had never been on the water, was to assume the character of a pilot, and to undertake, in that office, to conduct a ship through a channel beset with rocks, and the vessel, in the course of her passage, became wrecked in consequence of the scandalous imposition which the pretended pilot had practised on the captain and crew. In awarding a punishment against the offender, is an impostor of this description to receive no greater punishment than the regular pilot, admitting, even, that the latter had failed, from not possessing the full amount of knowledge required by the nature of the undertaking?

Suppose, even, that a person, having assumed the gown and wig of the learned Judge, had obtruded himself into the judgment seat, and there delivered some monstrously absurd or corrupt decision. Would a jury be told that if a regular Judge had acted in a similar manner he would be as liable to a prosecution as the prisoner?

Let us take another example, which must exhibit to the dullest comprehension the serious error into which the learned Judge has fallen. Let us suppose that SALMON had been prosecuted for acting, in the case before us, *as an apothecary*,—for acting in a medical capacity, and supplying the medicine, without having a license from the Apothecaries' Company. On the very evidence which was adduced on the trial the other day, the learned Judge must have told the jury that the conviction was inevitable, and the defendant must pay a fine at least of twenty pounds, as he was subscribing and supplying medicines *as an apothecary*, in direct contravention of the law. To hold a contrary doctrine is to encourage the quacks, and give them liberty to proceed under the sanction of some of the highest authorities in the land. What does the learned Judge mean by "want of caution" in the treatment of Captain MACKENZIE? There was *incaution* enough exhibited, when ROBERT SALMON undertook to prescribe for Captain MACKENZIE *at all*, and nothing short of the most greedy avarice could have prompted the quack's tool and agent to persevere in administering his poisonous trash, until he reduced the unhappy patient to his last gasp.

Taken altogether, the case presents to the view of the profession, another instance of the extraordinary, and, we almost fear, incurable gullibility of the English public.

The magnitude of the evil, however, against which the profession has to contend, ought to stimulate them to increased activity and exertion, and we call upon them, in the name of that science which they practise, to set every power which is at their disposal in motion, for the purpose of exposing quacks and abolishing quackery. Let it be matter of indifference only to the *learned judges*, whether in the treatment of the sick the practitioner be legally qualified for executing the duties of his office, or whether he be avowedly or undisguisedly acting the part of an impostor.

Mr. Mountain, the porter of *Guy's Hospital*, who was charged by a correspondent in the last Lancet, with prescribing occasionally for sick applicants at his lodge in that institution, has taken his good-humoured face to our office, and given utterance to what we really believe to be a well-founded complaint against the accusation of our correspondent. Mr. Mountain declares that he does not prescribe physic for any body, not even for himself, and we believe that he speaks the truth. He is no pretender in medicine. He has no desire to rank with the St. John Longs, the Macleods, or the Morisons. He protests that he is neither a real nor a sham physician, and from our own experience we can affirm that a better-tempered, a more civil, or a more respectable Cerberus, never guarded a gate. In fact, the attributes of this excellent individual are redeeming qualities in the establishment of *Guy's Hospital*. Like other great men, however, he has on this occasion been subjected to the shafts of malice, and he, as well as others, will now acknowledge that envy is not a respecter of persons.

On Tuesday, March 8th, at 5 o'clock, M. Sanson was proclaimed at Paris, Professor of Clinical Surgery. The chair left vacant by the illustrious Dupuytren, could not have been filled by a more worthy successor; yet, strange to say, M. Sanson owes his election to a kind of hazard. On the first ballot MM. Marjolin, Roux, Lisfranc, and Murat, voted for M. Blandin; Messrs. Cloquet, Dubois, Richerand, and Velpeau, for young Berard, the professor's brother. M. Sanson had only three votes; those of Chomel, Gerdy, and Reviellé-Parise. It was found impossible to reconcile the contending interests of the Blandin and Berard parties. A second ballot became necessary, and the friends of M. Berard, finding there was no hope of his obtaining more than four votes, transferred their votes to M. Sanson, who was thus elected by a majority of eight votes, to a situation for which he was certainly the most competent.

In the cross examination of Mrs. Mackenzie, on the trial of Robert Salmon for manslaughter at the Old Bailey, on Wednesday, Sir Frederick Pollock asked that lady "if she had ever given her husband, the deceased, any bread pills." (*Report in the Morning Chronicle.*) The countenances of the medical men who were present, with difficulty preserved their gravity.

We regret to say that M. Parent du Chatelet, physician to *La Pitié*, and author of several important works on public health, died on the 7th of March.

THE LATE MR. WILLIAM DOBSON.

On the 10th instant died, at his house, Princes-street, Westminster, in the 29th year of his age, Mr. Wm. Dobson, Lecturer on Comparative Anatomy in the *Westminster School of Medicine*. The deceased was the eldest son of Mr. George Dobson, of Rothwell, near Leeds. The subject of this notice commenced his short, but at one time promising career, at the school of the late Charles Turner Thackrah, at Leeds. His success in the country led to his introduction to a school in the metropolis; and having lectured for some time in the Westminster School of Medicine, he assumed in that establishment in October last the chair of Comparative Anatomy. Immediately afterwards signs of pulmonary disease appeared, and, on the 10th instant, Mr. Dobson was

added to the number of the victims of consumption.

We regret to state that Mr. Dobson was not enabled to leave a provision for an amiable wife and two infant children, who are therefore left destitute by his death. Under these distressing circumstances, several gentlemen, professional friends of the deceased, have entered into a subscription for the widow and children, the particulars of which will, we presume, be duly and extensively advertised.

We take this opportunity of apologizing to some of our correspondents, and to the whole of our readers, in consequence of several typographical errors which appeared in THE LANCET of last week. Unfortunately it was not discovered until a late hour that we should be called on to publish that number of the Journal on Thursday, as the following day happened to be Good Friday. From this circumstance several of the articles went to press without the proof-sheets having been read by the Editor. In the leading article there were two or three ludicrous errata. In one place the writer was represented as having devoted "thirty' years to the cause of medical reform, instead of *thirteen*, and in the prescriptions of the notorious Bread Pills, there was manifested a singular confusion of terms. We therefore now place them before the non-medical reader in a corrected form, and although RODERICK, — poor RODERICK, — may believe that the error was waggishly, or, if he will, maliciously introduced, in order to furnish us with a plausible excuse for bringing *his* nostrum once more before the public, we veritably assure him that he owes his this week's notoriety to accident, and to that alone. The prescriptions for the Bread Pills of RODERICK MACLEOD, Physician of *St. George's Hospital*, should have stood in the last LANCET thus:—

"PILULÆ EX MICA PANIS.	PILLS FROM CRUMB OF BREAD.
"℞ *Micæ panis* ʒi.	Take of *Crumb of Bread* one drachm.
Divide in pilulas xii, quarum una sumatur ter quotidie."	Divide into twelve pills, of which let one be taken three times daily.

MR. WEISS'S LITHOTRITE.

To the Editor of THE LANCET.

SIR: I have read in your last number some observations of Mr. Weiss on the subject of his lithotrite, for the confirmation of which he appeals to me. I have always given Mr. Weiss credit for being the inventor of the lithotrite at present in use, as the various instruments now employed are founded upon one constructed by Mr. Weiss long before Baron Heurteloup employed percussion, and I regret that justice has not been done to Mr. Weiss by those who have availed themselves of his invention.

Having, for a long time turned my attention to lithotrity, I have endeavoured to remedy some of the principal objections to the operation, by an addition to the mechanism of the instrument. With this view I have examined all the lithotrites in use, and have found none so efficient, made with so much exactness, and so safe, as Mr. Weiss's. I have selected, therefore, his instrument for the addition to which allude, and I am happy to add that the cases on which I have alread used this instrument, fully bear me out in speaking to its entire efficiency.

Waiving for the present a description of the lithotrite, I beg to remain, Sir, your most obedient servant,

C. ASTON KEY.

St. Helen's-place, April 4th, 1836.

Mr. WARDROP has in the press a work on the Pathology and Treatment of the Diseases of the Heart, to which are prefixed some Physiological Researches on the Circulation of the Blood.

CORRESPONDENTS.

(*From a Correspondent*)—The "religion" of King's College, though the stalking-horse of its first days, has been found so unattractive, that it has ceased to be used as a bait and the compulsion of regular students "to go to chapel" has been wholly given up.

Alpha.—Dr. ** we suppose has not yet had warning enough to get out of the concern.

A. F.—We reduced the communications of "W. C." to statements which did not require personal an bentication. Otherwise that correspondent would have been required to attach his name to his letters. The note transmitted by *A. F.* wants an address, and would weigh nothing in the scale. The question, however, is one not of names, but of facts.